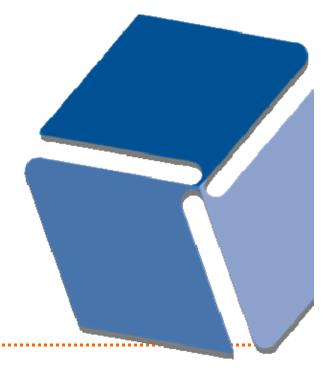
Connecting Higher Education with the Future of Iowa



October 30, 2008 Ames, Iowa

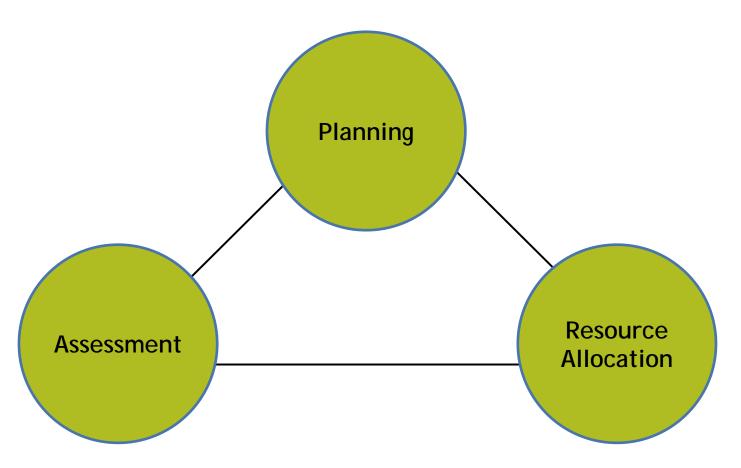


National Center for Higher Education Management Systems 3035 Center Green Drive, Suite 150 Boulder, Colorado 80301

PERSPECTIVES ON PLANNING



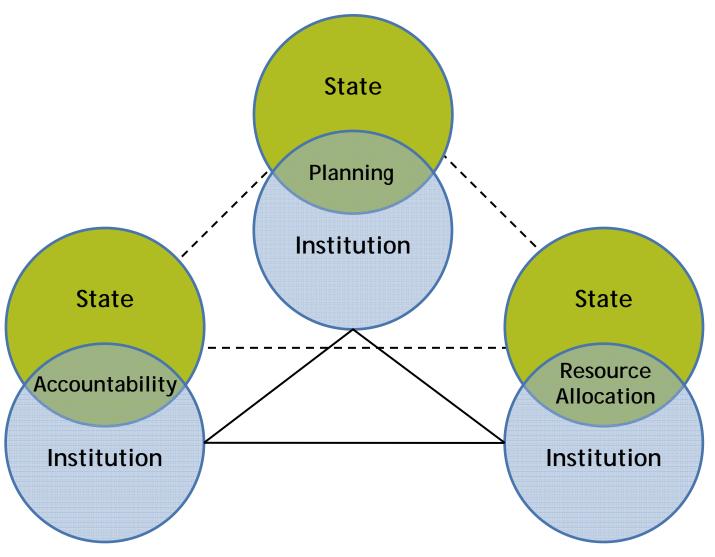
The Management Cycle



Strategic Management - The allocation of resources to programmed activities calculated to achieve a set of goals.



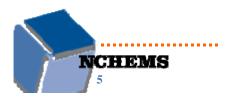
The Management Cycle





Public Agenda

THE PRIORITY ISSUES FACING THE STATE & ITS CITIZENS THAT HIGHER EDUCATION IS CALLED UPON TO ADDRESS.



The Objective

 Identify 3-5 key issues that the Regents Universities should address in developing their institutional strategic plans.



WHY EDUCATION MATTERS

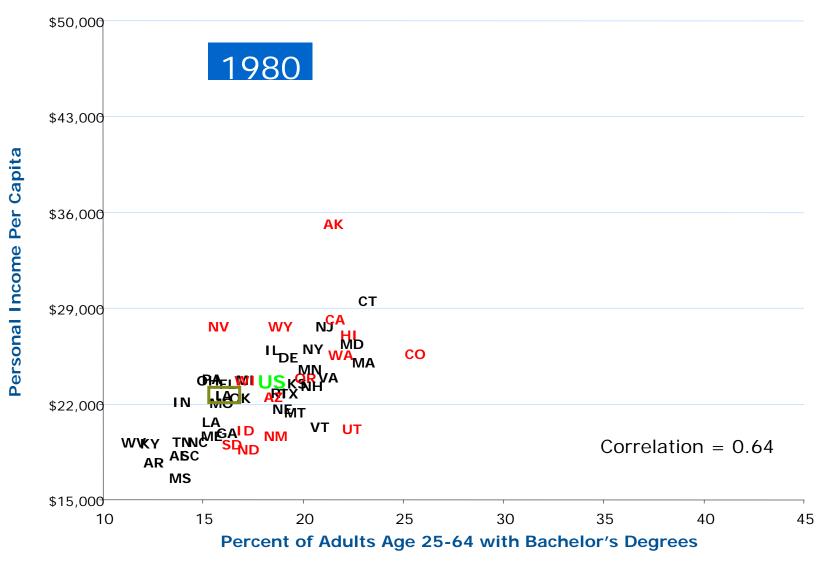


Relationship Between Educational Attainment, Personal Income, and Economic Strength

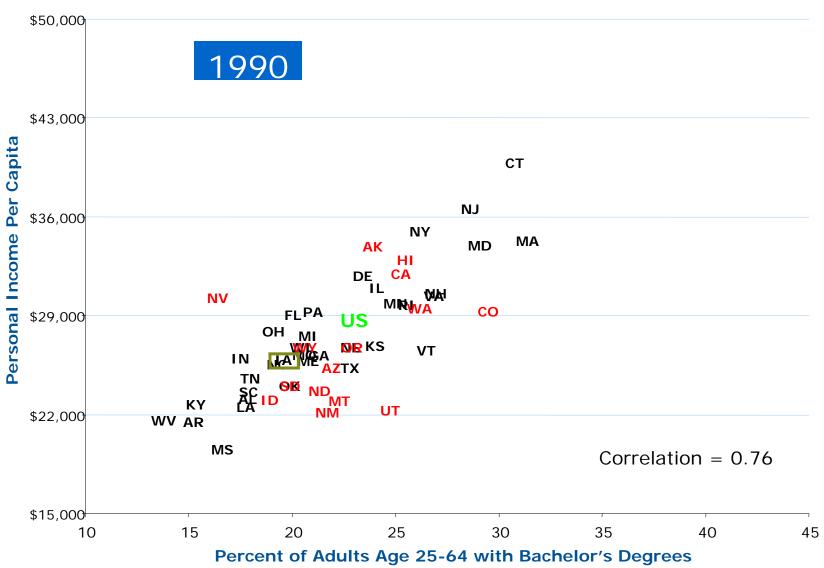




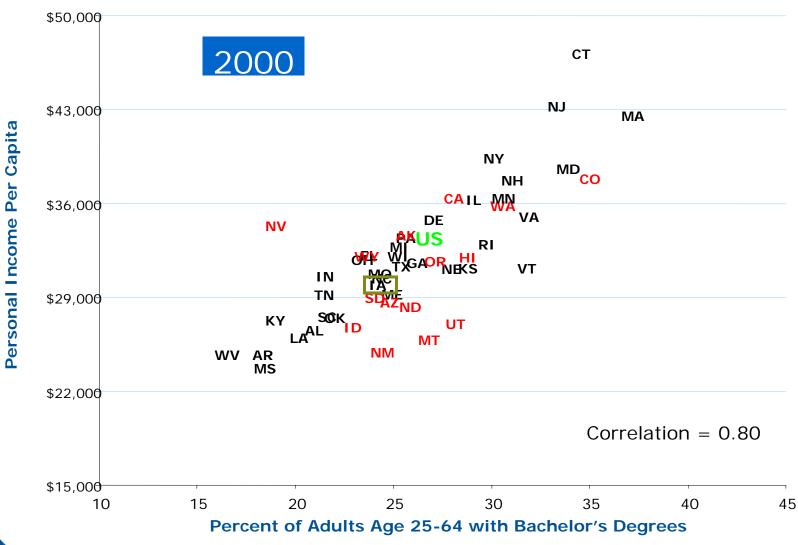
NCHEMS
slide 8



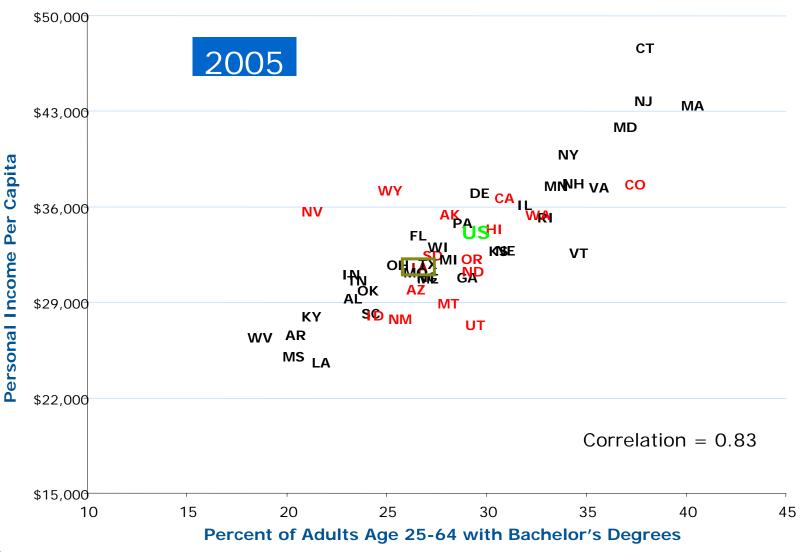






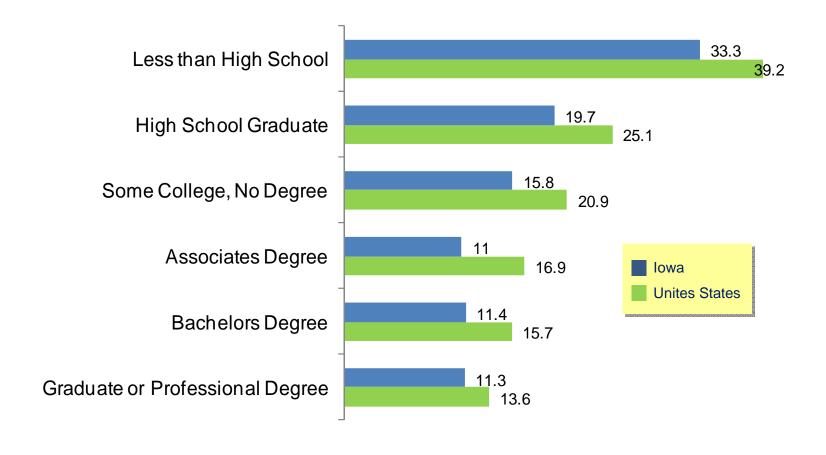






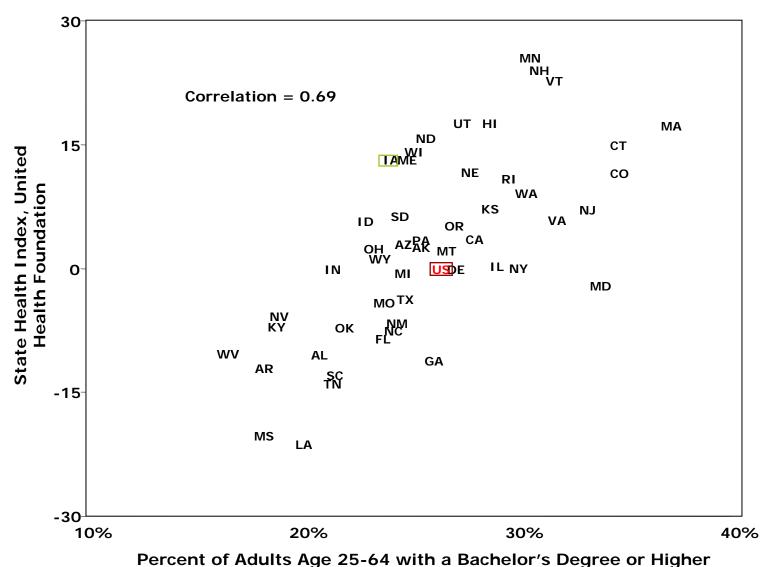


Percent of Civilians Age 25-64 Not in the Workforce, 2006 listed by Education Attainment





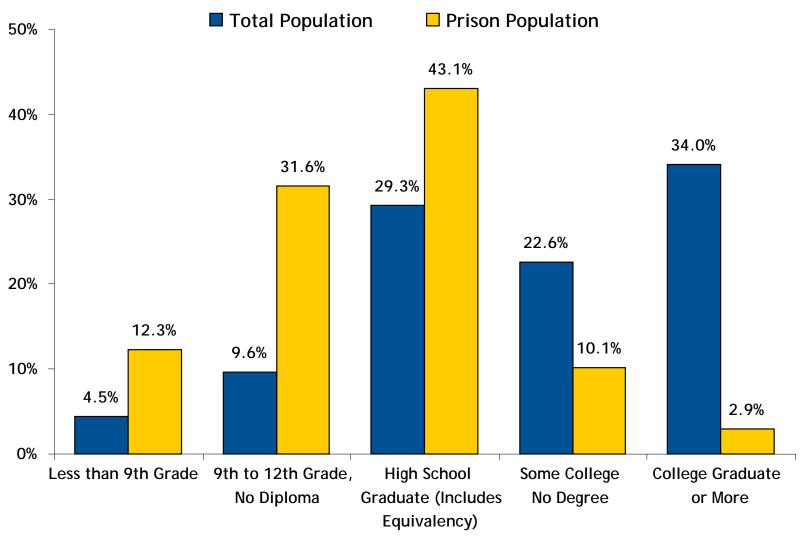
Relationship Between Educational Attainment and Health





. a zachorer e zegree er ringhte

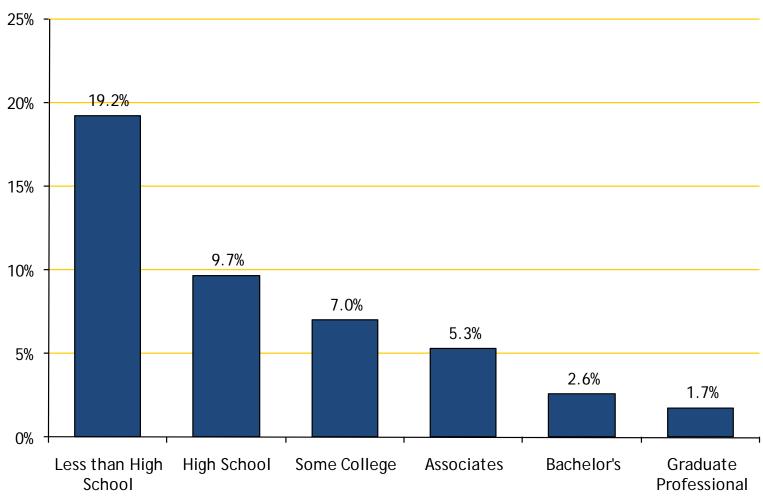
Educational Attainment of 18 to 64 Year Olds – Total U.S. Population vs. the Prison Population





Source: US Bureau of Justice Statistics 2002 data, US Census Bureau 2005 data

Percentage of Adults 18 to 64 Receiving Medicaid by Level of Education (2005 to 2007)

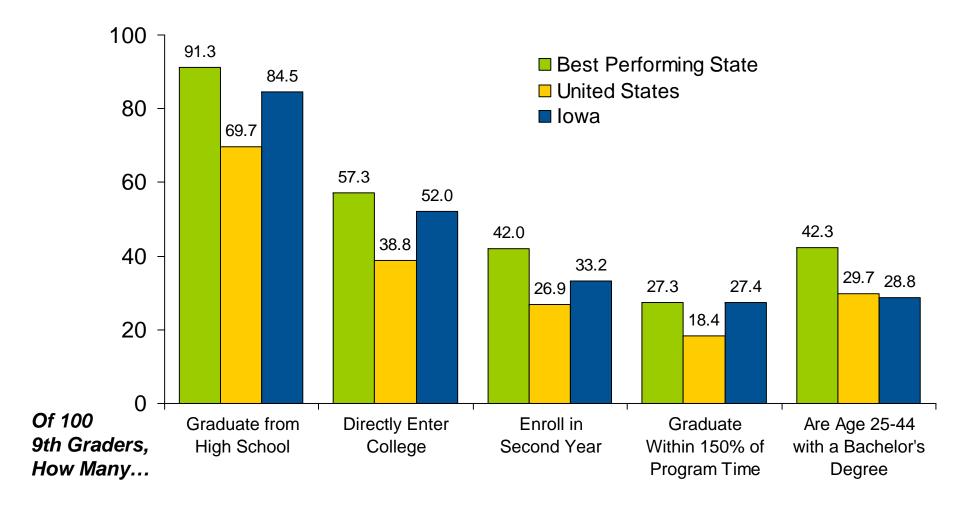




EDUCATION AN IOWA SUCCESS STORY

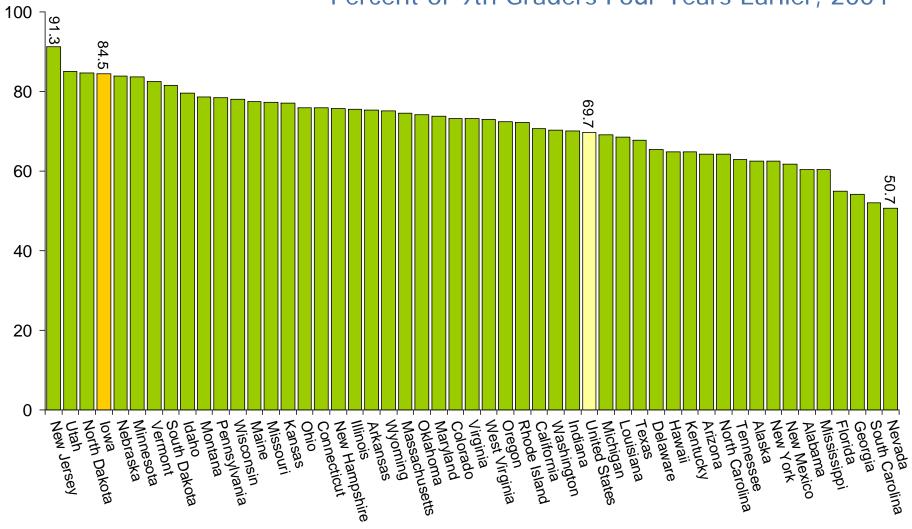


Student Pipeline, 2004



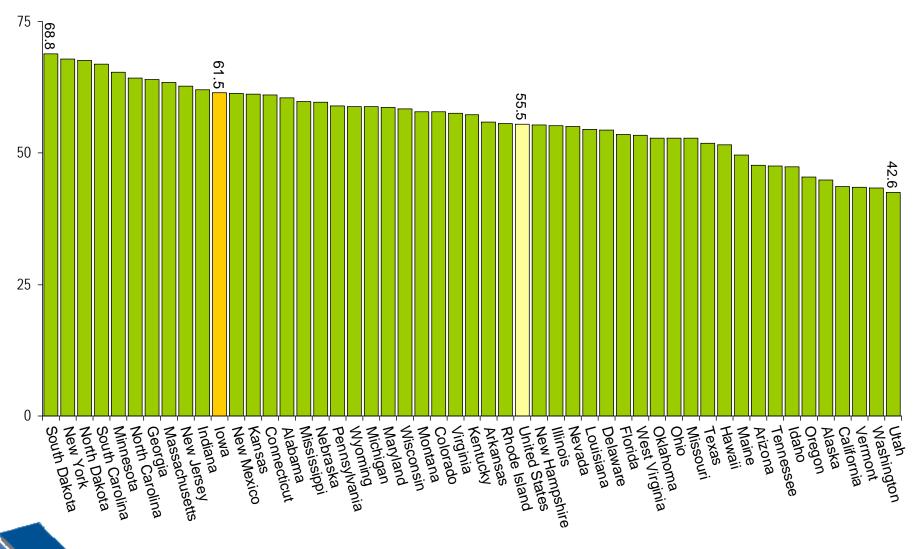


High School Graduation Rates - Public High School Graduates as a Percent of 9th Graders Four Years Earlier, 2004





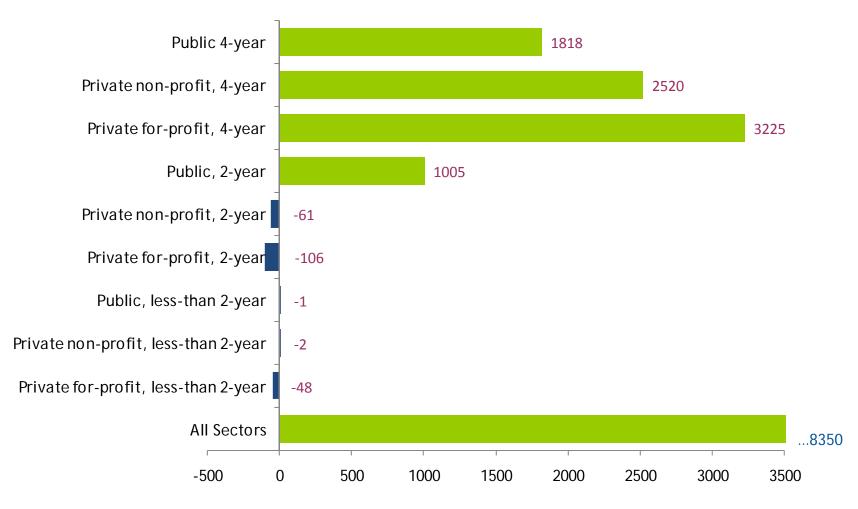
College-Going Rates—First-Time Freshmen Directly Out of High School as a Percent of Recent High School Graduates, 2004





Source: Tom Mortenson, Postsecondary Opportunity (2004 data update 02-06-07)

Iowa Net Migration of First-time College Students by Sector (Fall 2006)





Source: NCHEMS NCES IPEDS Enrollment Survey, Part C, Fall 2006

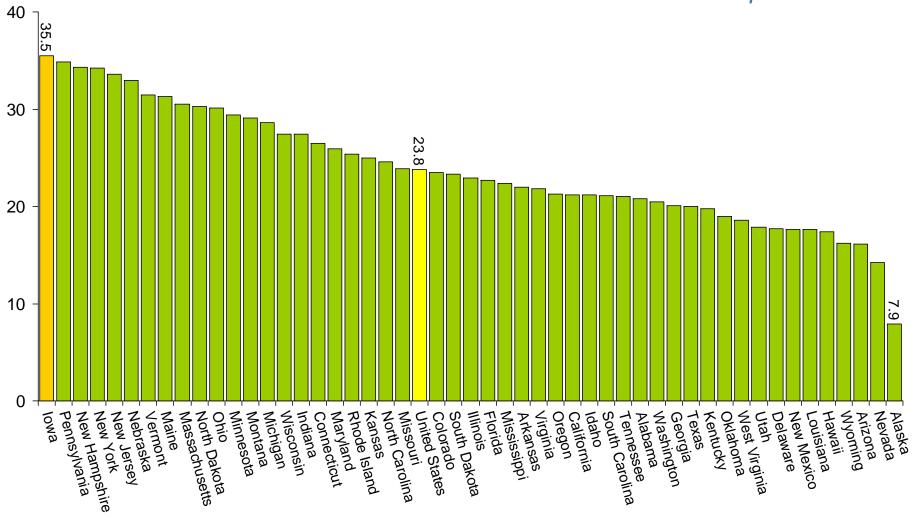
Top Out-of-State Institutions Iowa Residents Attend, Fall Institution State First-Time Freshman 2006

Institution	State	First-Time Freshman
Northwest Missouri State University	MO	139
South Dakota State University	SD	120
Creighton University	NE	113
University of South Dakota	SD	107
University of Nebraska at Lincoln	NE	83
University of Wisconsin-Platteville	WI	70
Wayne State College	NE	68
University of Phoenix-Online Campus	AZ	67
American Intercontinental University Online	IL	61
Southeast Technical Institute	SD	54
Metropolitan Community College Area	NE	53
Truman State University	MO	52
Wyo Tech	WY	51
University of Nebraska at Omaha	NE	50
Western International University	AZ	49
Minnesota State University-Mankato	MN	46
Augustana College	SD	44
Augustana College	IL	34
St. Olaf College	MN	33
Western Illinois University	IL	32
University of Missouri-Columbia	MO	29
University of St Thomas	MN	28
University of Sioux Falls	SD	28
University of Kansas Main Campus	KS	27
Northwestern College	MN	27
Marquette University	WI	27
Black Hawk College	IL	26
Dana College	NE	26
Hamilton College-Omaha Campus	NE	25
Colorado Technical University Online	CO	25



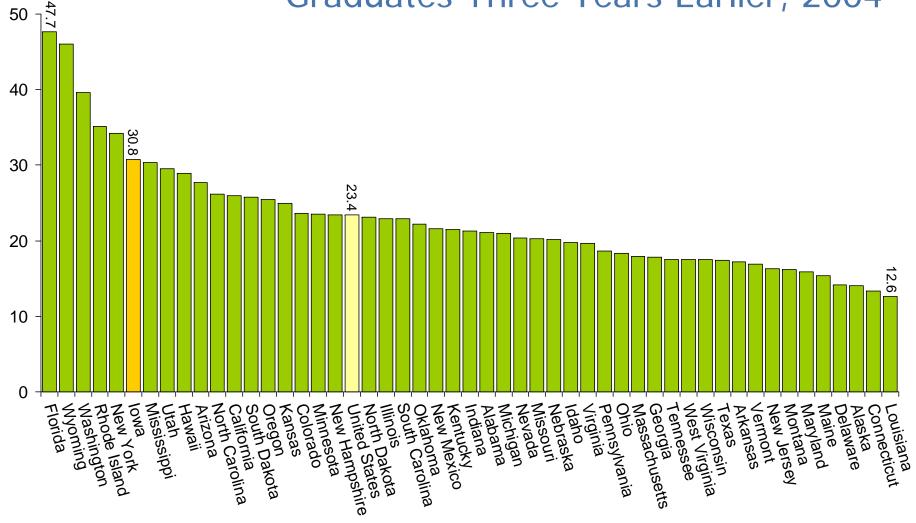
Source: NCES, IPEDS Fall 2006 Residence and Migration File; ef2006c Final Release Data File.

College Participation Rates by State for Students from Low-Income Families, 2006



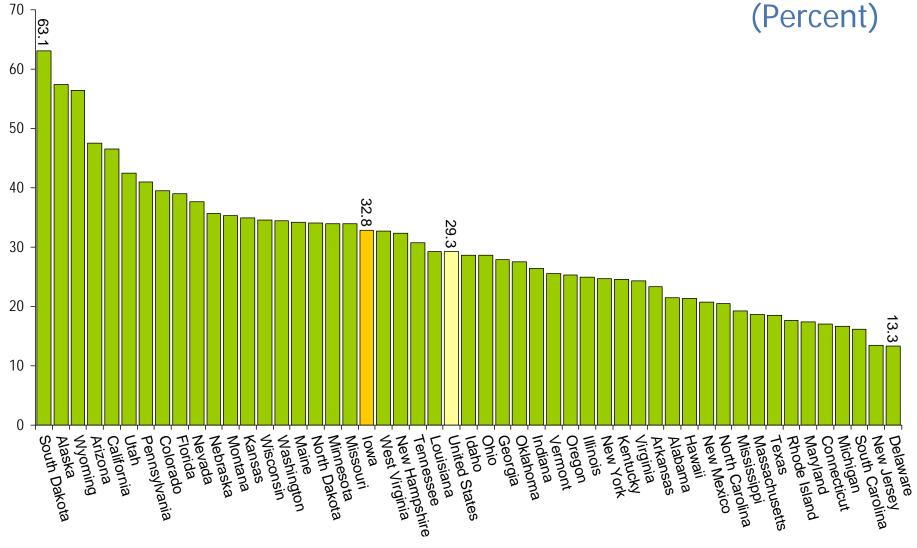


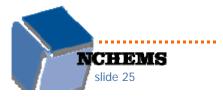
Associate Degrees Awarded per 100 High School Graduates Three Years Earlier, 2004



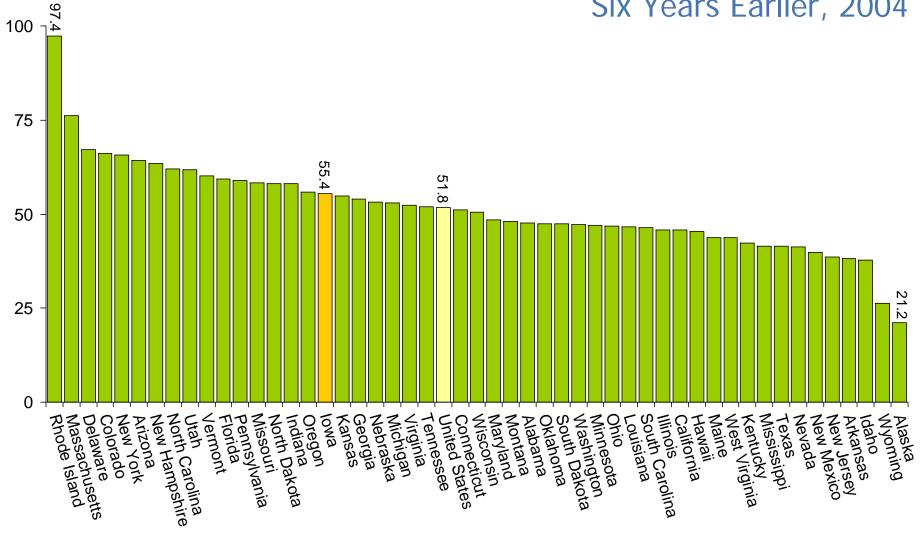


Three-Year Graduation Rates at Two-Year Colleges, 2005 (Percent)



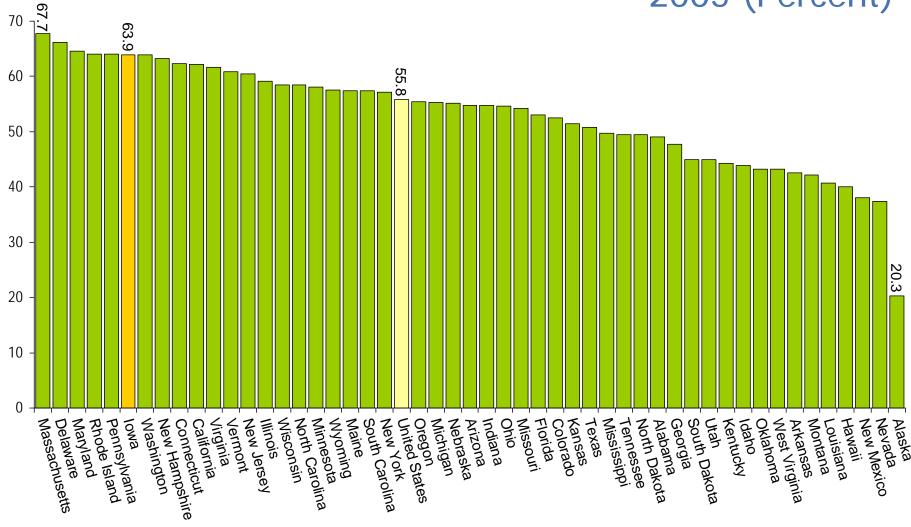


Bachelor's Degrees Awarded per 100 High School Graduates Six Years Earlier, 2004



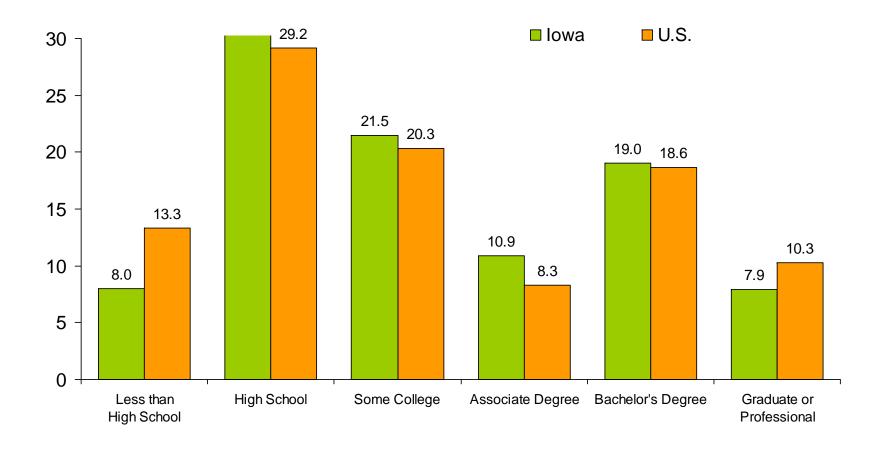


Six-Year Graduation Rates at Four-Year Colleges, 2005 (Percent)



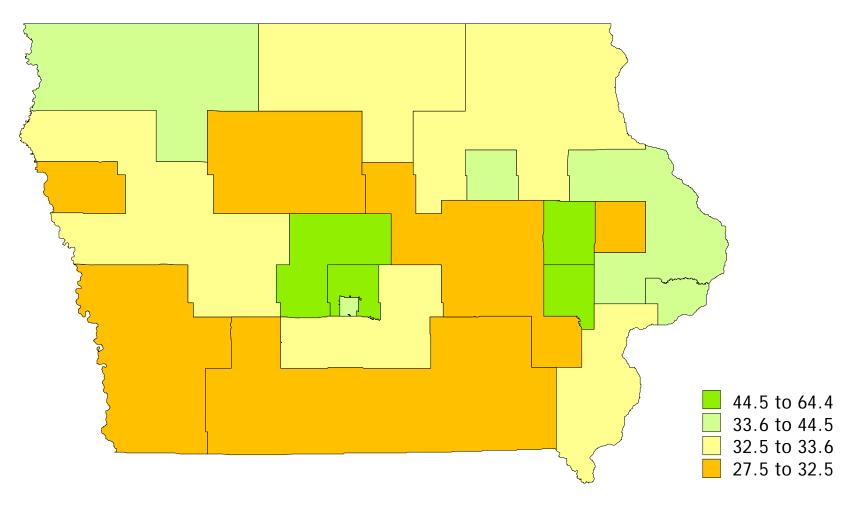


Educational Attainment of Population Age 25-64, 2006





Percent of Population Age 25-64 with an Associate Degree or Higher, 2006 - PUMAs

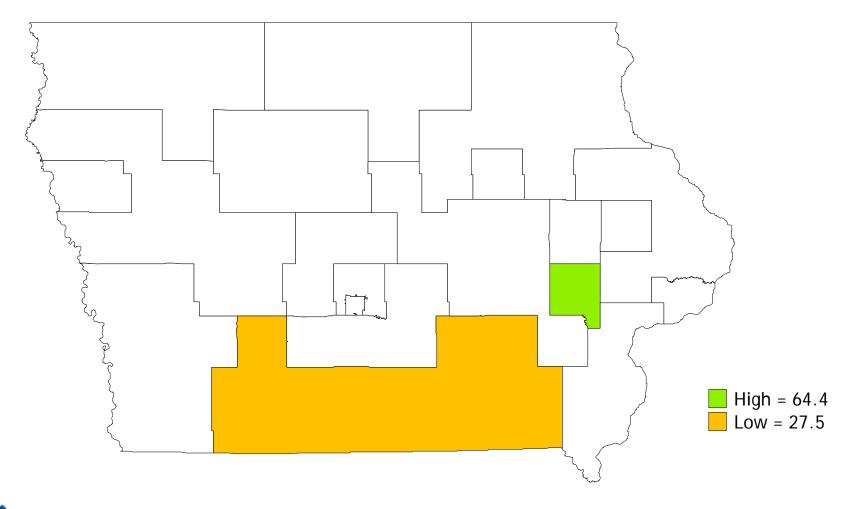




Iowa = 37.8

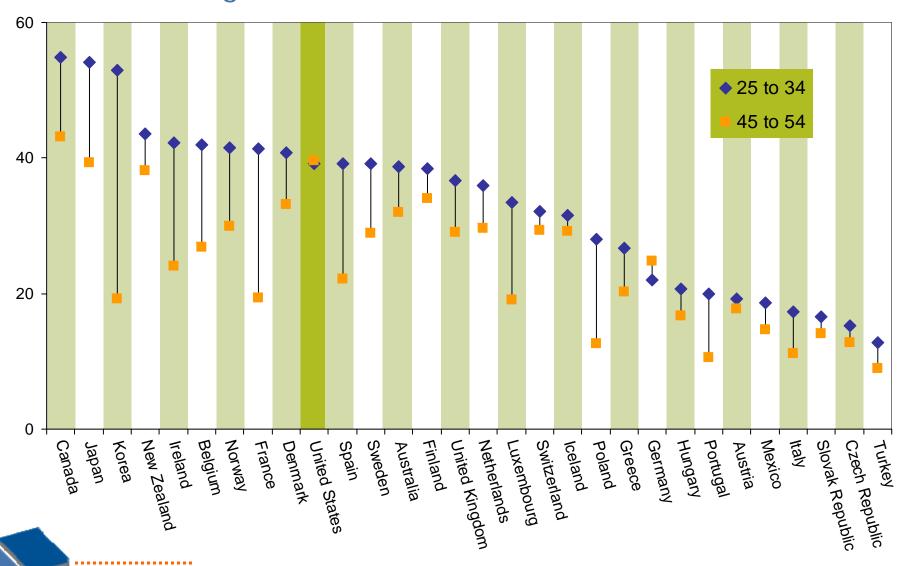
Source: U.S. Census Bureau, 2006 American Community Survey

Percent of Population Age 25-64 with an Associate Degree or Higher, 2006 – High and Low PUMAs

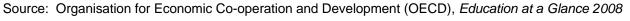




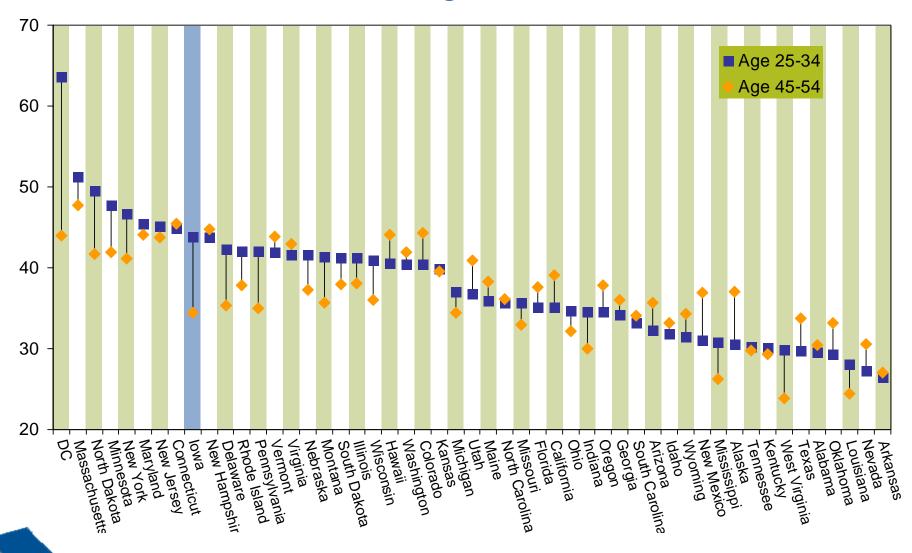
Differences in College Attainment (Associate & Higher) Between Younger & Older Adults—U.S. & OECD Countries, 2006



NCHEMS
slide 31

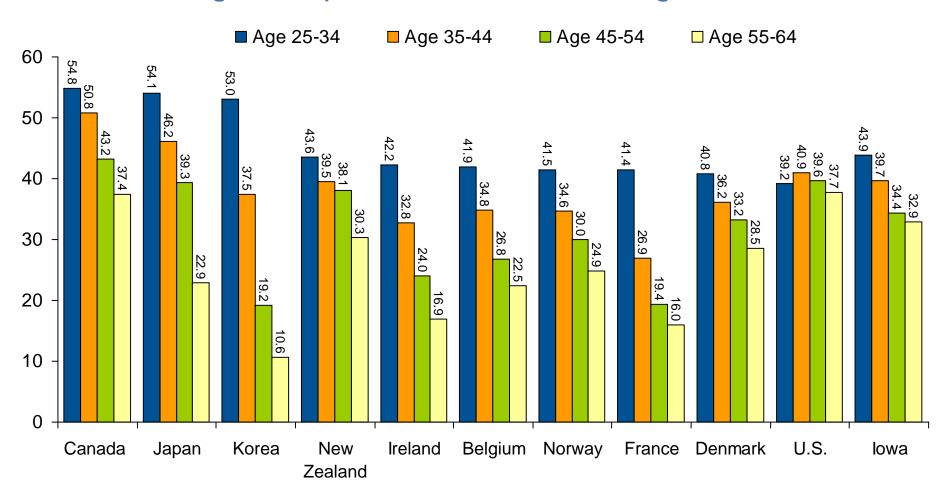


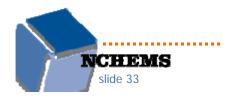
Differences in College Attainment (Associate & Higher) Between Younger & Older Adults—U.S., 2006





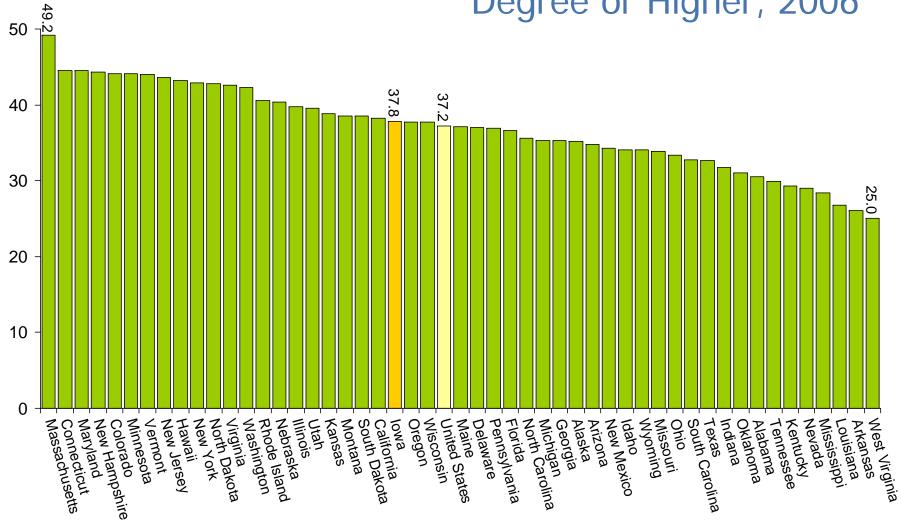
Percent of Adults with an Associate Degree or Higher by Age Group - Iowa, U.S. & Leading OECD Countries

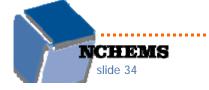




Source: OECD, Education at a Glance 2008

Percent of Population Age 25-64 with an Associate Degree or Higher, 2006





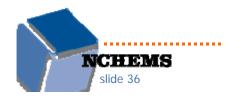
The Goal: Iowa Reaching International Competitiveness by 2025

55% of
Population
Age 25-64 with
College Degrees



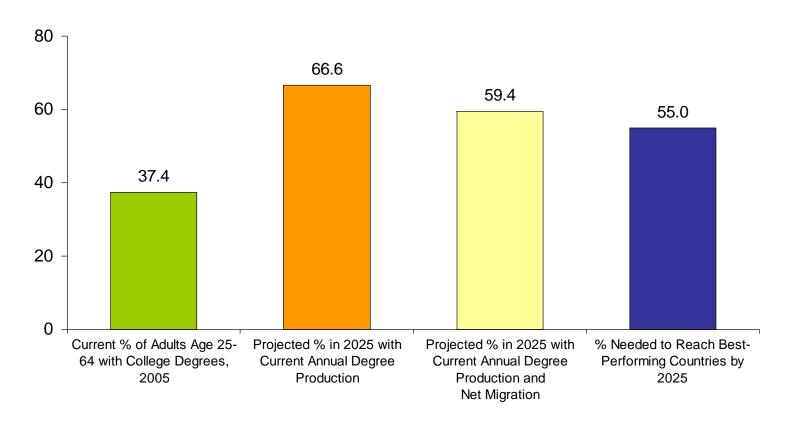
Reaching Top Performance by 2025 (55%) - Iowa

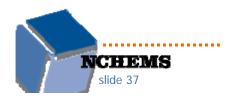
793,504	Number of Individuals to Match Best-Performing Countries (55%)
317,772	Number of Individuals (Age 25-44) Who Already Have Degrees
475,732	Additional Production Needed (2005 to 2025)
643,699	Degrees Produced at Current Annual Rate of Production



Educational Attainment in Iowa (%)

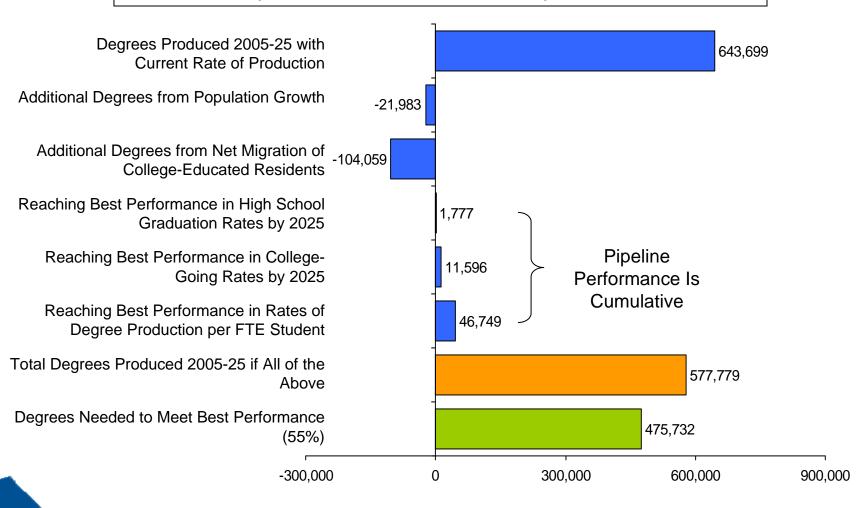
Current, in 2025 with Current Degree Production, and Best-Performing Countries in 2025





How Can Iowa Reach International Competitiveness?

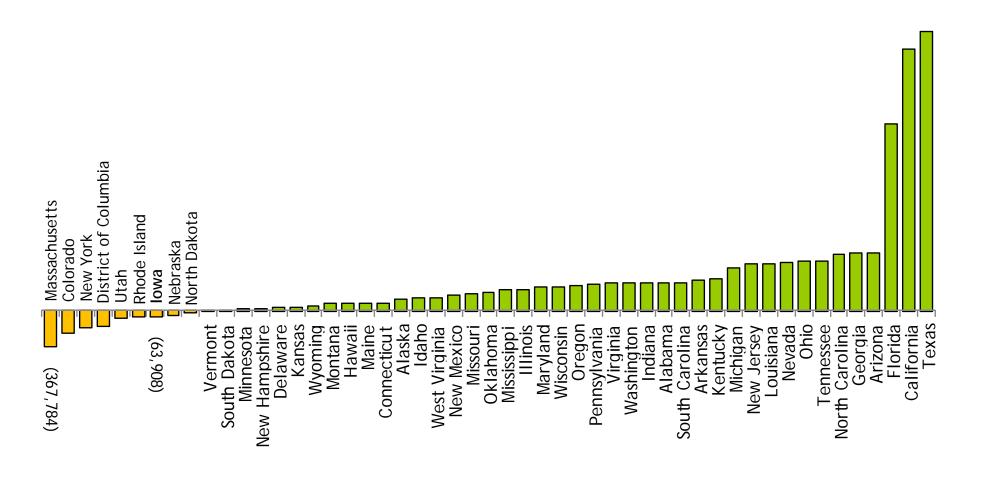
Current Degree Production Combined with Population Growth and Migration, and Improved Performance on Student Pipeline Measures

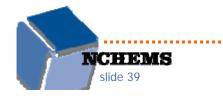


NCHEMS
slide 38

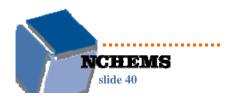
Source: 2005 ACS, PUMS

Additional Degrees Needed to Reach International Competitiveness (55%) by 2025





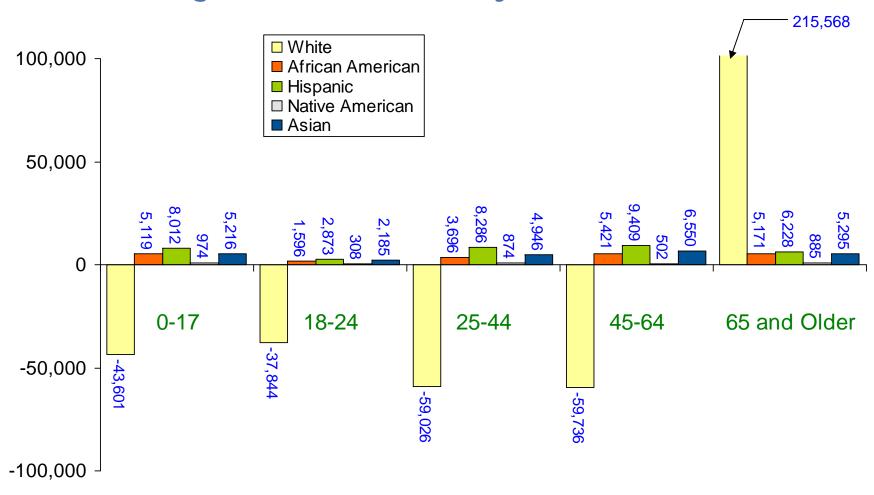
THE CHALLENGES FACING IOWA

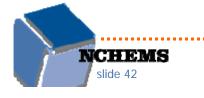


1. Reducing the Education Attainment Gap

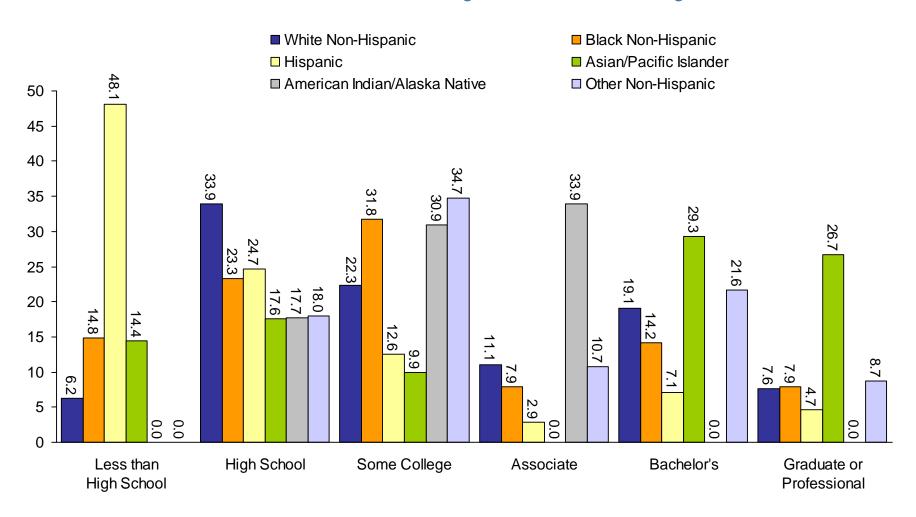


Projected Change in Iowa Population by Age & Race/Ethnicity, 2005-25 (in Thousands)



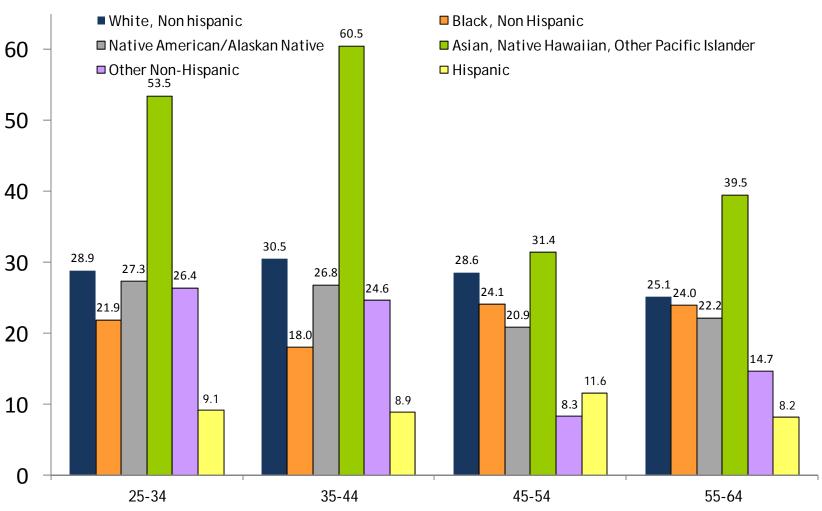


Percent Educational Attainment of Population Age 25-64 By Race/Ethnicity - Iowa, 2005





Percentage of Iowans with at Least an Associates Degree, by Race/Ethnicity, 2006





Difference in High School Attainment Between Whites and Minorities,* 2006

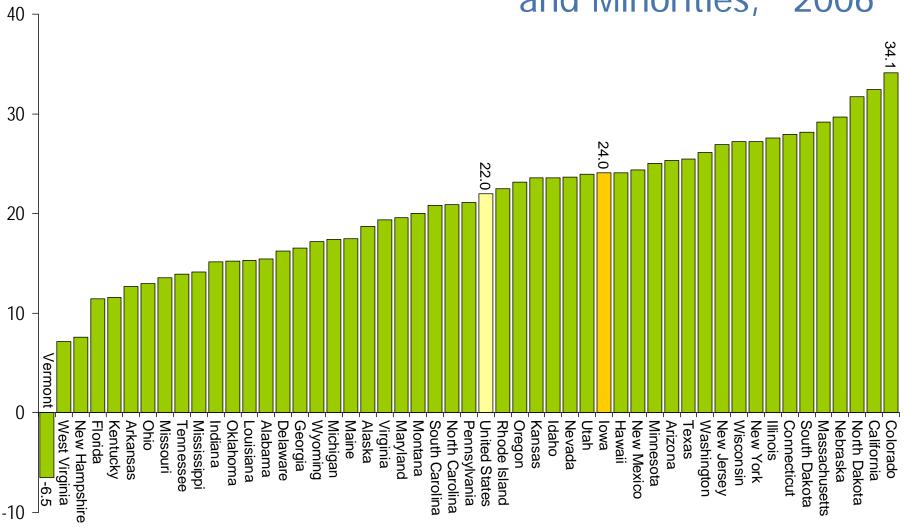


NCHEMS

slide 45

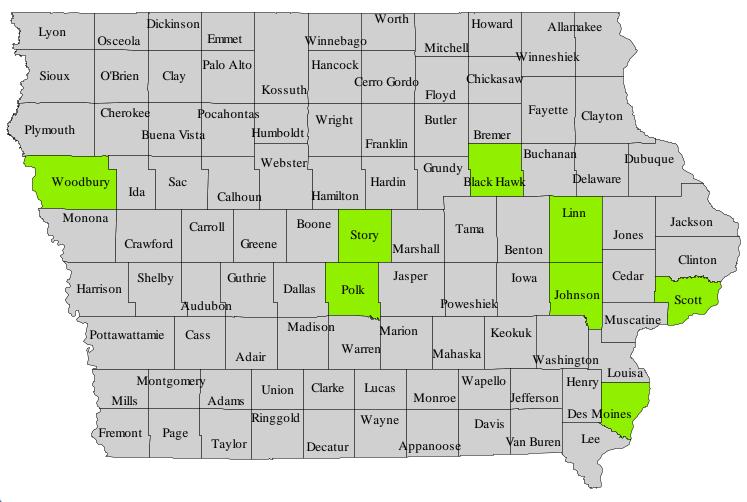
^{*} Minorities include African-American, Hispanic, and Native American Source: U.S. Census Bureau, 2006 ACS PUMS

Difference in College Attainment Between Whites and Minorities,* 2006





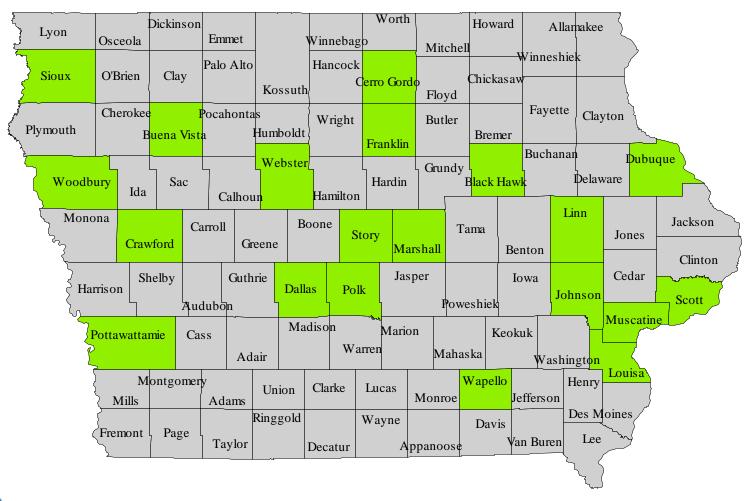
Counties Where 80% of Iowa's African-Americans Reside, 2007





Source: Population Division, U.S. Census Bureau; County Resident Population Estimates File

Counties Where 80% of Iowa's Hispanics Reside, 2007



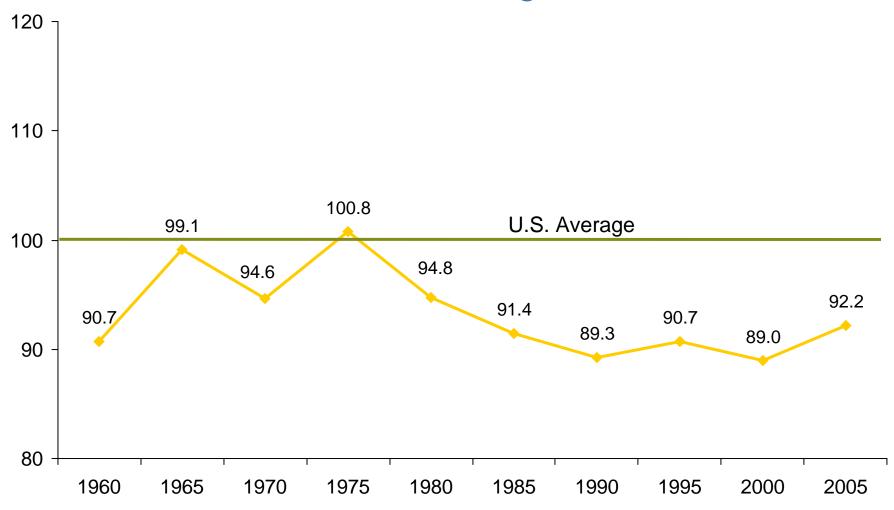


Source: Population Division, U.S. Census Bureau; County Resident Population Estimates File

2. Expanding and Diversifying the Economy

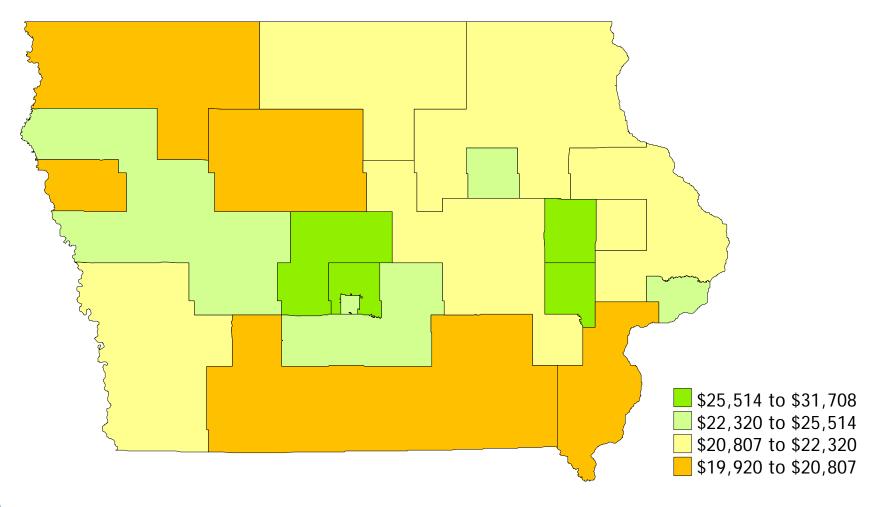


Per Capita Personal Income as a Percent of U.S. Average - Iowa, 1960-2005





Per Capita Income, 2006 – PUMAs

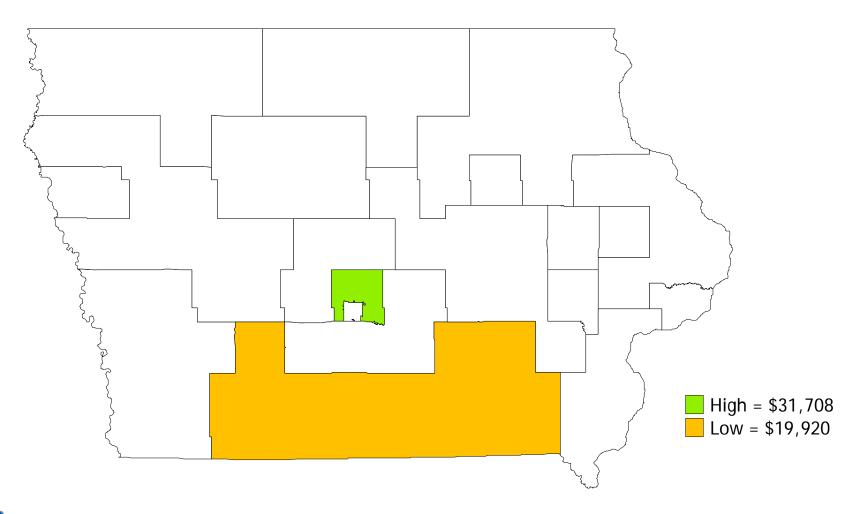




Iowa = \$23,115

Source: U.S. Census Bureau, 2006 American Community Survey

Per Capita Income, 2006 – High and Low PUMAs

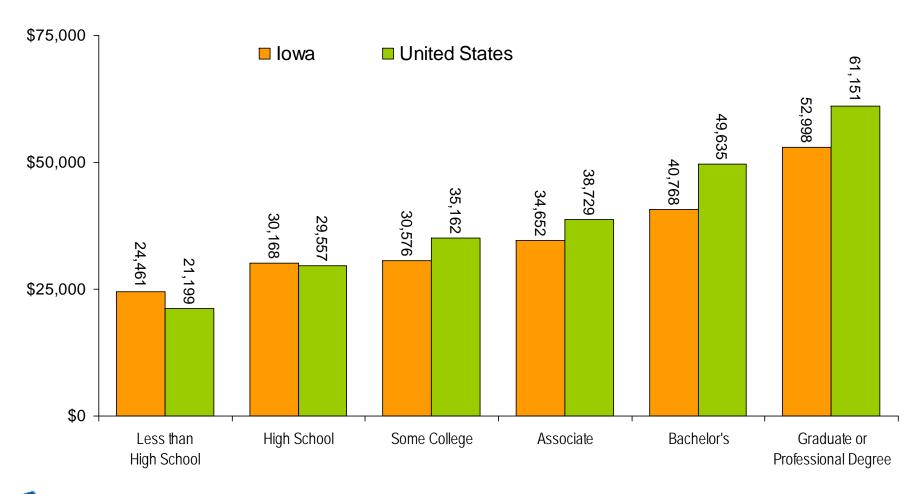




lowa = \$23,115

Source: U.S. Census Bureau, 2006 American Community Survey

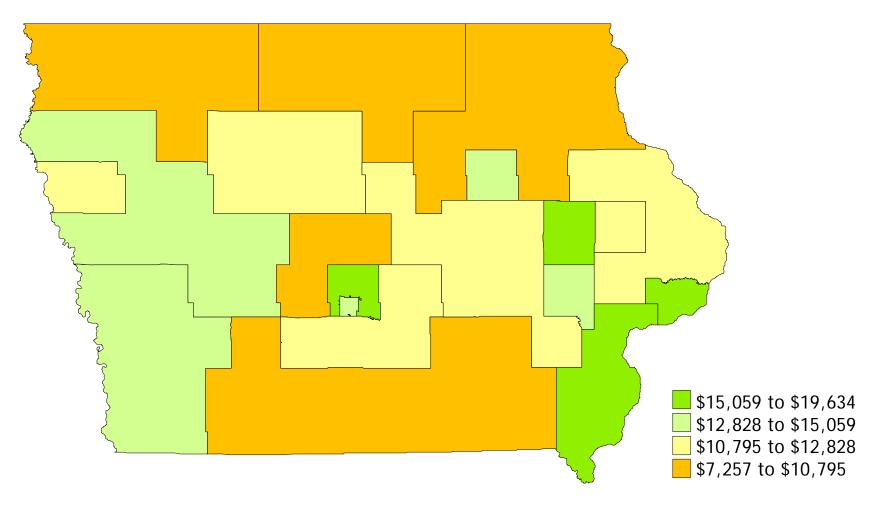
Median Earnings of Population Age 25-64 by Level of Education, 2005





Source: U.S. Census Bureau, ACS

Difference in Median Earnings Between a High School Diploma and a Bachelor's Degree, 2006 – PUMAs

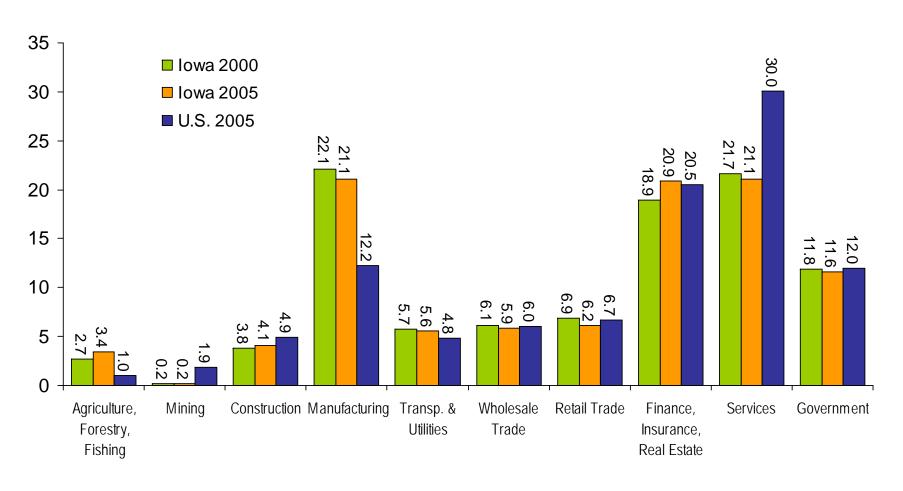


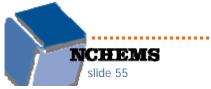


lowa = \$14,053

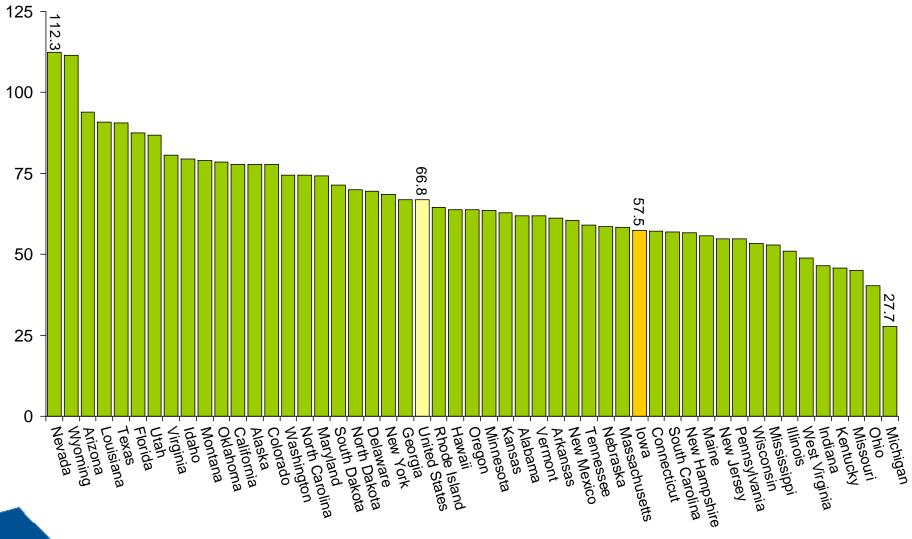
Source: U.S. Census Bureau, 2006 American Community Survey

Percent of Total Gross State Product by Industry and Comparison to U.S.



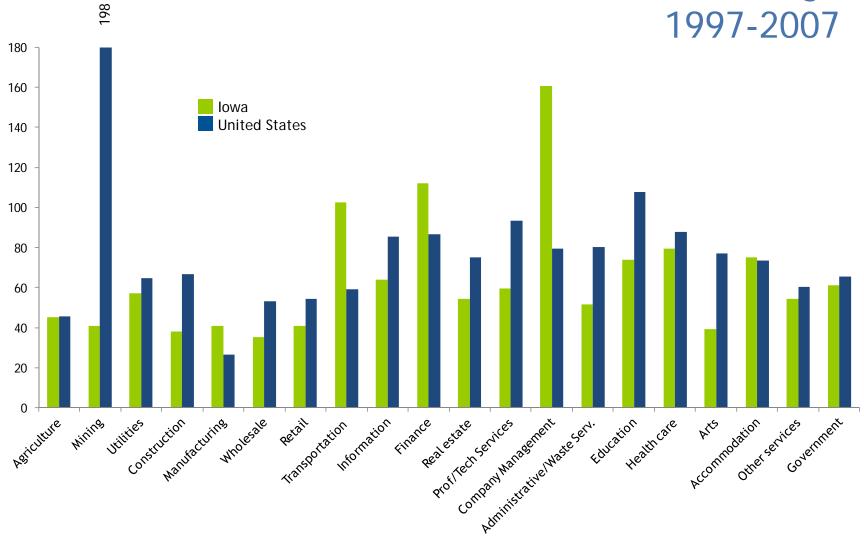


Percent Change in Gross State Product, 1997-2007





Gross Domestic Product – Percent Change





Development Report Card for the States, 2006 - Iowa

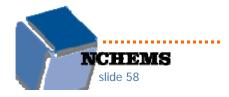
Iowa Strengths

Overall	
Performance	В
Employment Earnings & Job Quality Equity Quality of Life Resource Efficiency	D A A A C
Business Vitality	D
Competitiveness/Existing Businesses Entrepreneurial Energy	C F
Development Capacity	С
Human Resources Financial Resources Infrastructure Resources Amenity Resources & Natural Capital Innovation Assets	C F D A

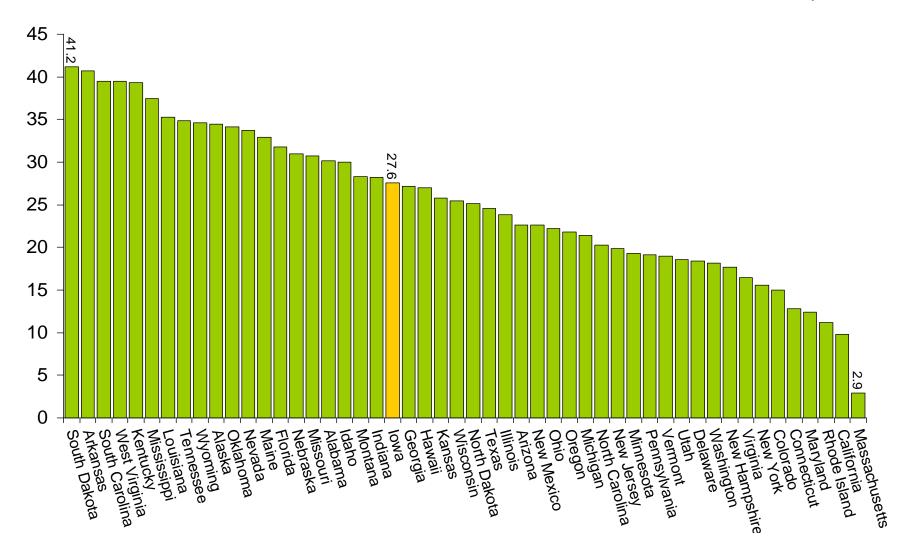
Rank	Measure
1	Air Pollution
2	Income Distribution
4	Involuntary Part-Time Employment
5	High School Completion
5	Affordable Urban Housing
5	Business Closings
6	Rate of Recycled Waste
8	Voting Rate
9	Employer-Provided Health Insurance
9	Income Distribution Change
9	Working Poor
10	Royalties & Licenses
10	Academic R&D

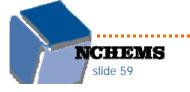
Iowa Weaknesses (Bottom 10 Rankings)

Rank	Measure
41	SBIC Financing
43	Change in Unemployment Rate
43	Change in Uninsured Low- income Children
44	Manufacturing Investment
45	Change in Poverty Rate
45	Venture Capital Investments
47	SBIR Grants
48	Change in Homeownership Rate
49	Employment Growth: Long Term
50	New Companies

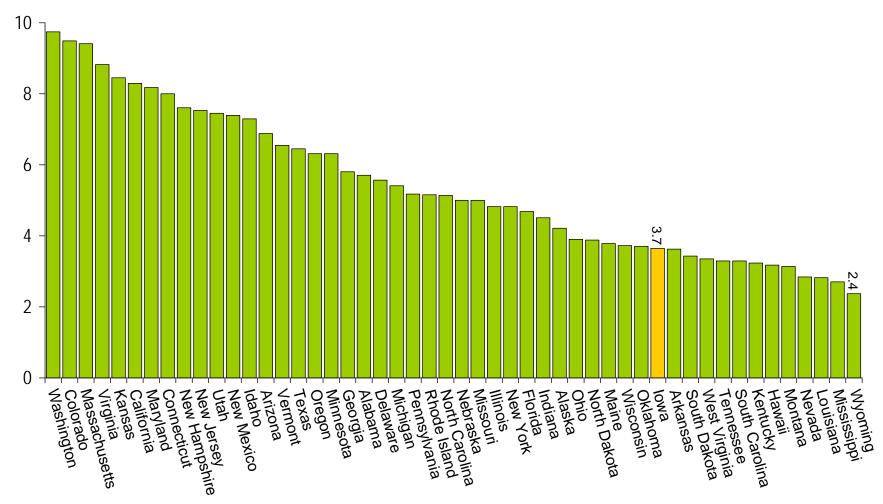


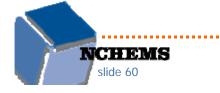
Overall State Scores on Measures of Innovation Assets, 2004



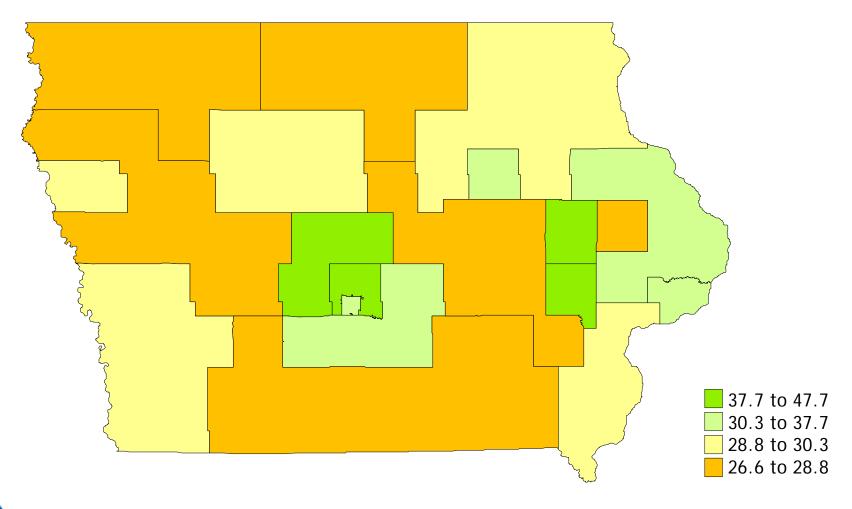


Employment in High-Technology Establishments as Share of Total Employment by State, 2004





Percent Employment in Management and Professional Occupations, 2006 – PUMAs

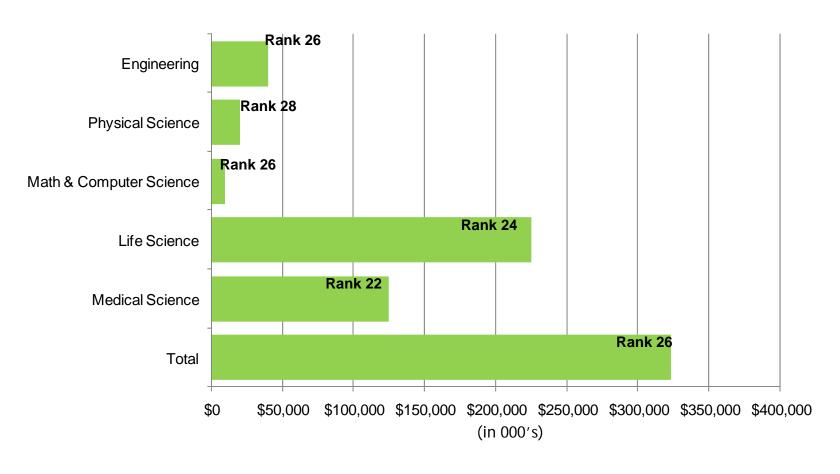




Iowa = 32.6

Source: U.S. Census Bureau, 2006 American Community Survey

Federal Research & Expenditures Iowa, 2006





Note: Population rank is 30th

Source: National Science Foundation

Federal Research & Expenditures per Capita Iowa, 2005



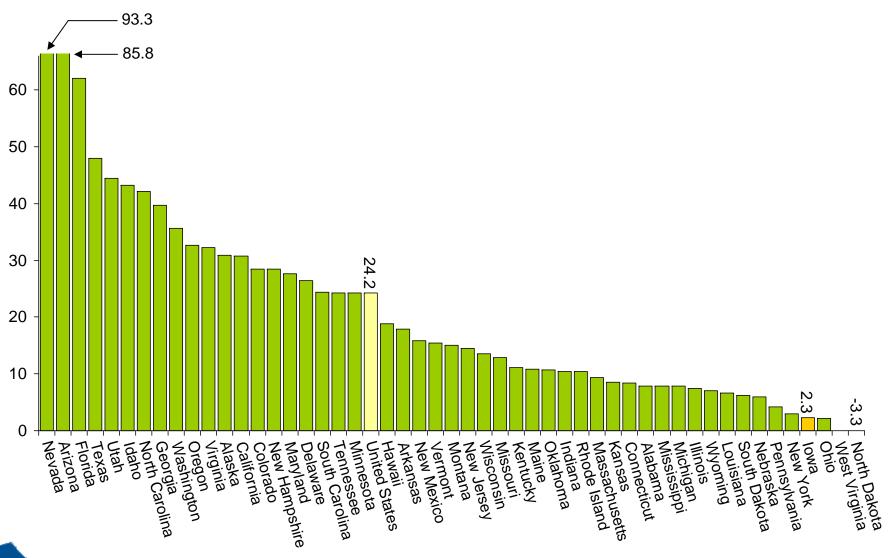


Source: National Science Foundation

3. Meeting Workforce Needs in the Face of Changing Demographics



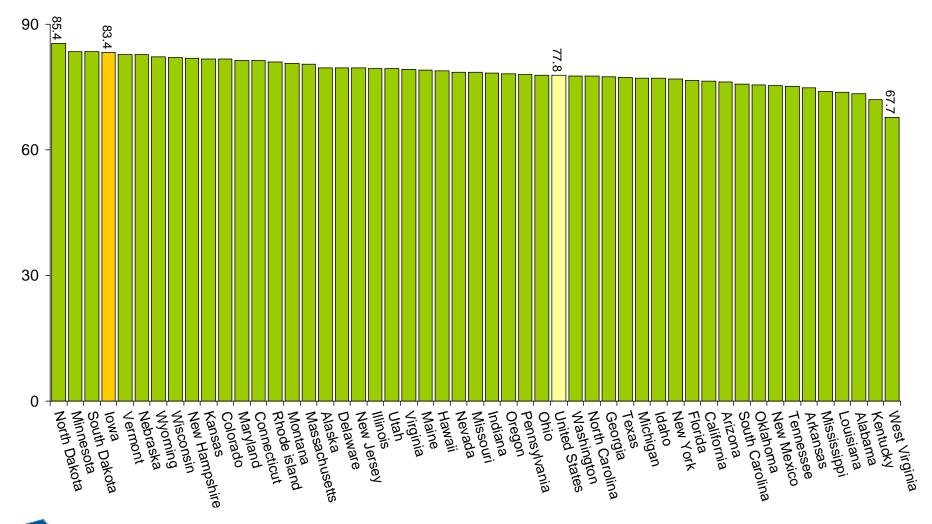
Population Projections—Percent Change, 2000-25





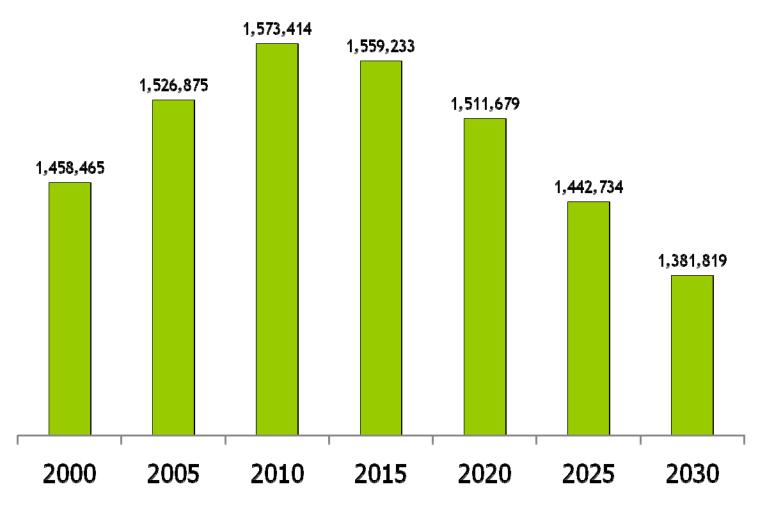
Source: U.S. Census Bureau

Percent of Civilian Population Age 25-64 Participating in the Workforce, 2005





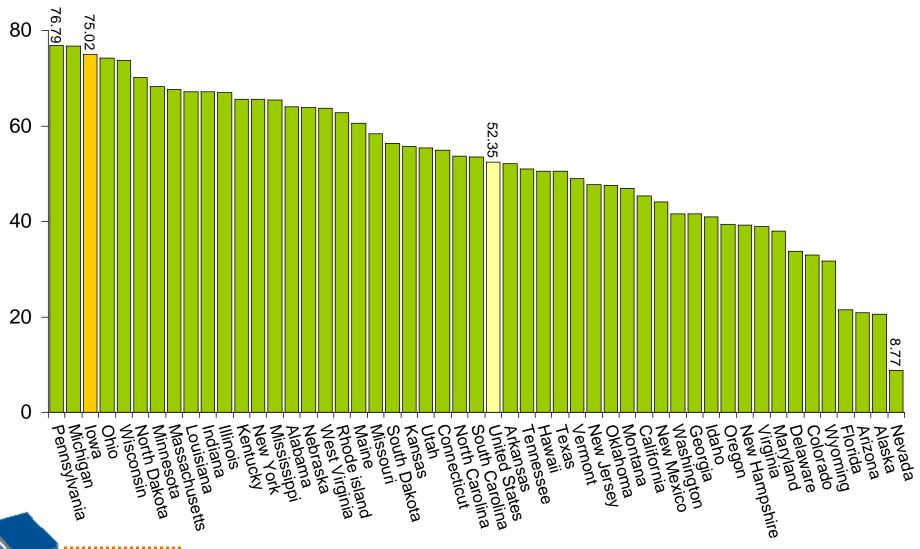
Iowa Population Projections, Ages 25-64, 2000-2030





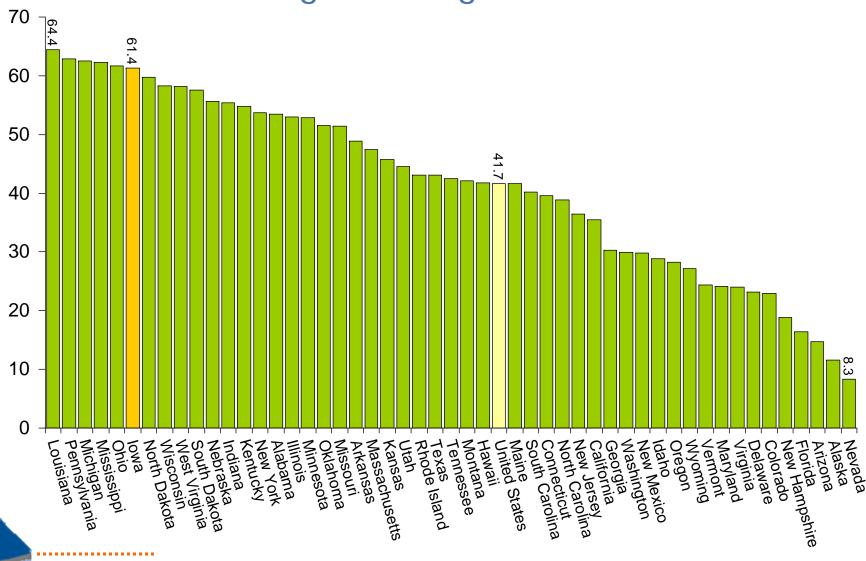
Source: U.S. Census Bureau, Population Division, Interim State Population Projections, 2005. Internet Release Date: April 21, 2005

Percent of Residents Age 25-64 with an Associate Degree Born In-State, 2005

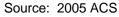


NCHEMS slide 68 Source: 2005 ACS

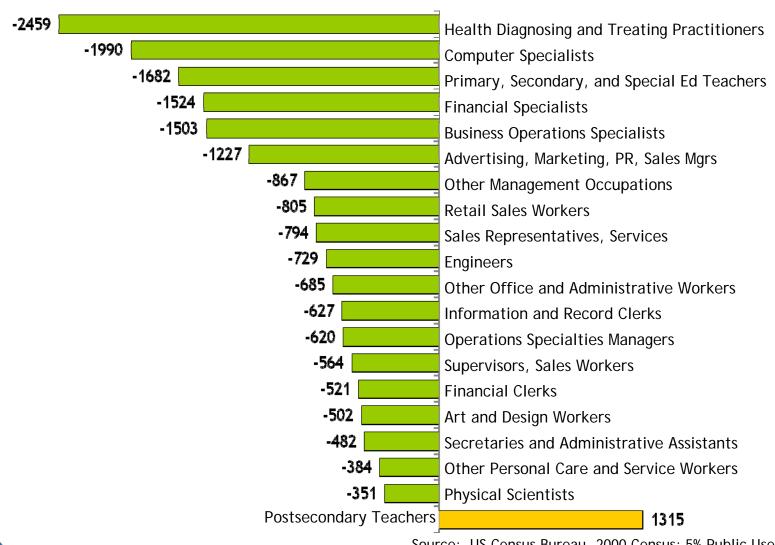
Percent of Residents Age 25-64 with a Bachelor's Degree or Higher Born In-State, 2005

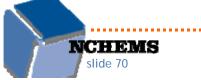


NCHEMS slide 69



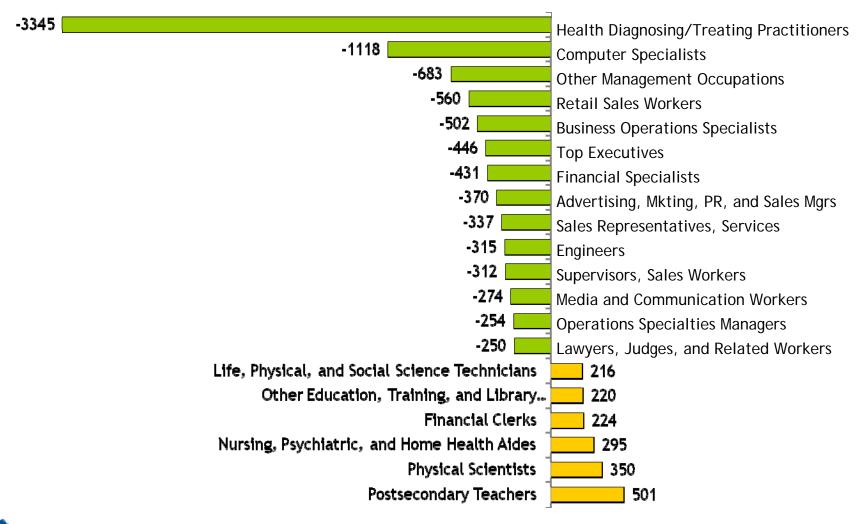
Iowa Net Migration by Occupation, Ages 22-29





Source: US Census Bureau, 2000 Census; 5% Public Use Microdata Sample (PUMS) Files.

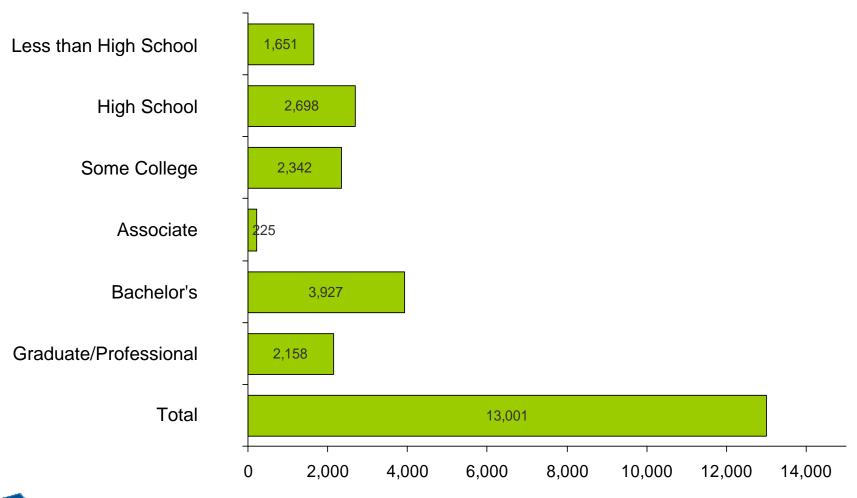
Iowa Net Migration by Occupation, Ages 30-64





Source: US Census Bureau, 2000 Census; 5% Public Use Microdata Sample (PUMS) Files.

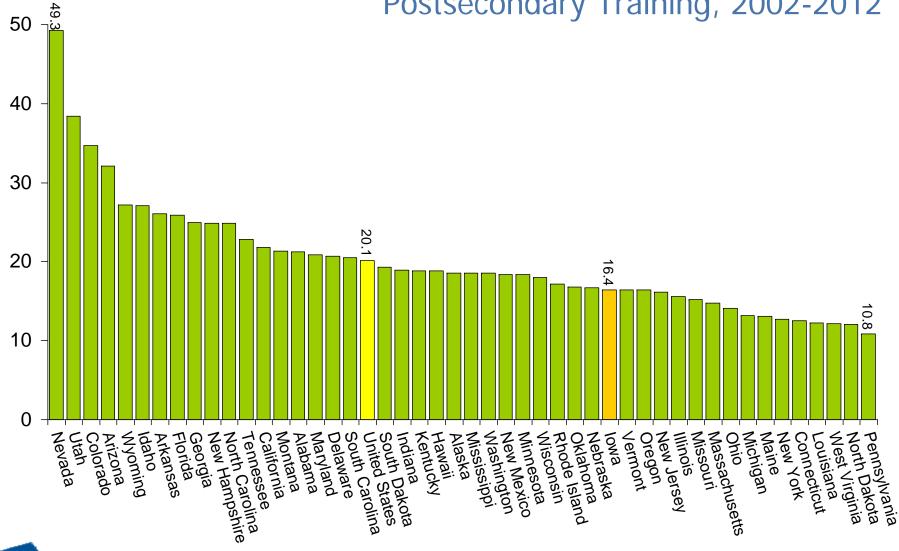
Iowa Net Migration of Residents Age 22-64 by Level of Education, 2005-06





Source: 2006 ACS (PUMS)

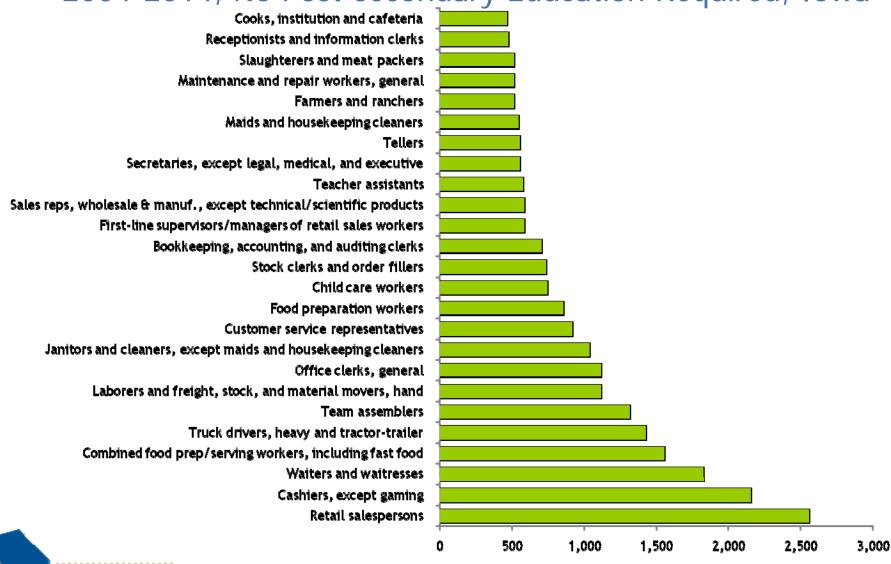
Projected Percent Change in Occupations Requiring Some Postsecondary Training, 2002-2012





Note: Some college, Associate, Bachelor's and higher. Source: ACINet, Career InfoNet

Occupations with Most Average Annual Openings, from 2004-2014, No Post-secondary Education Required, Iowa

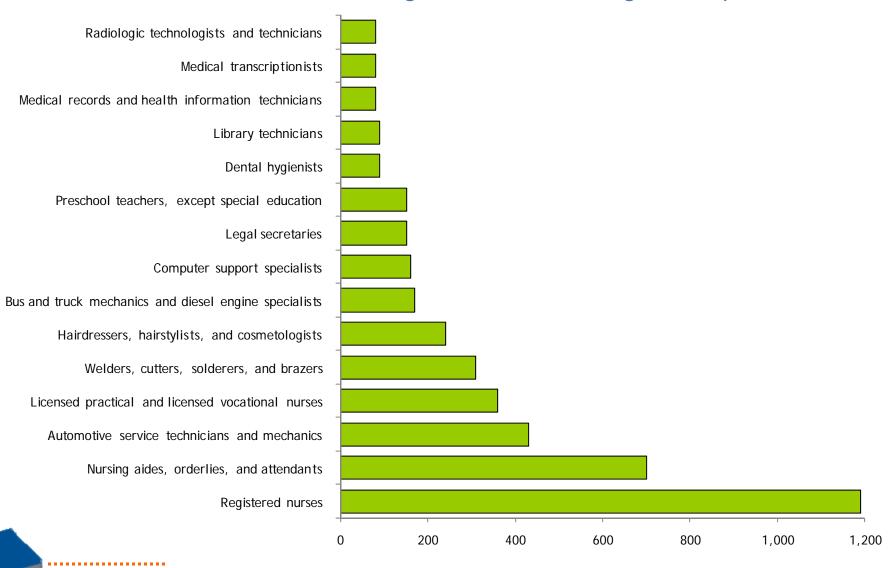


NCHEMS

slide 74

Source: ACINET

Occupations with Most Average Annual Openings, from 2004-2014, Some College or Associate Degree Required, Iowa

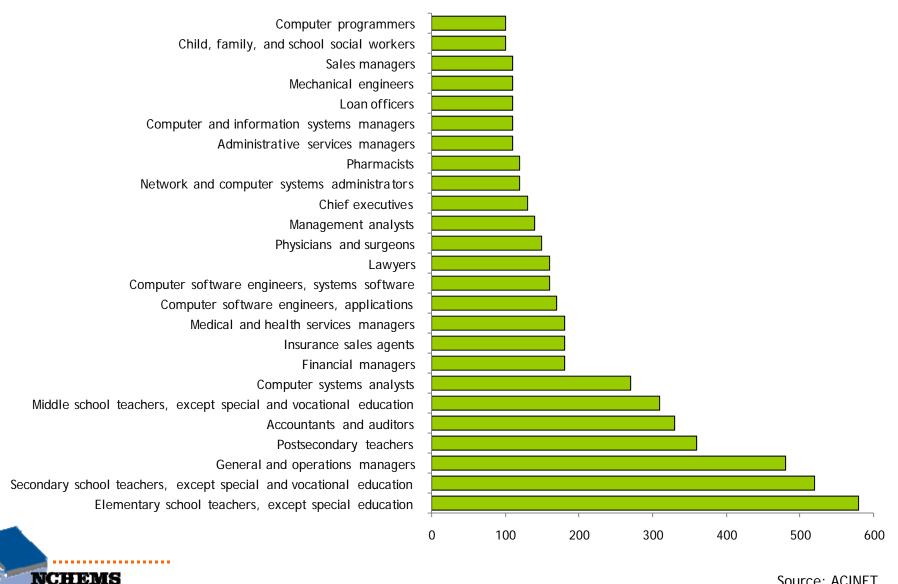


NCHEMS

slide 75

Source: ACINET

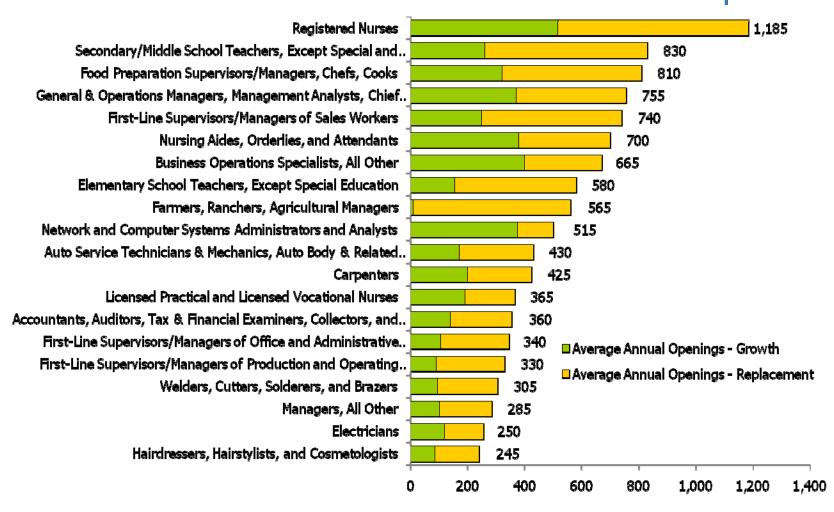
Occupations with Most Average Annual Openings, from 2004-2014, Bachelor's Degree or Higher Required, Iowa

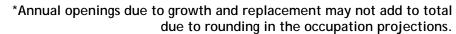


slide 76

Source: ACINFT

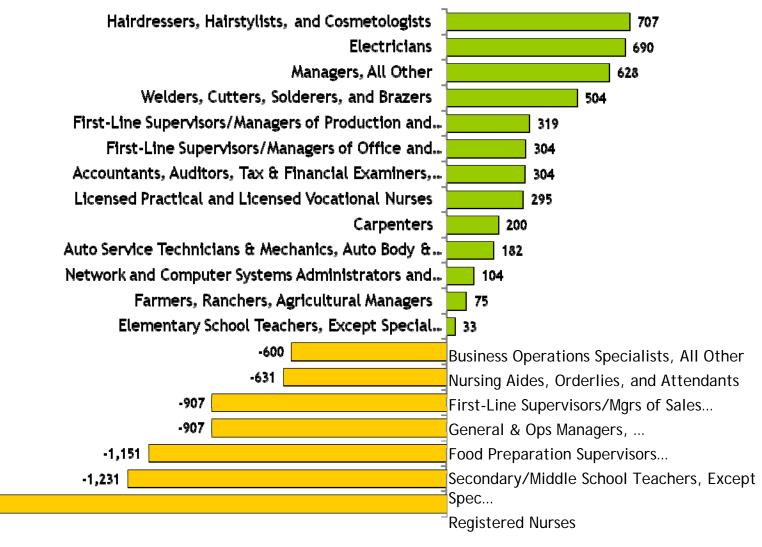
Iowa Average Annual Openings in High Demand Occupations







Iowa Supply Gap in High Demand Occupations





NCHEMS

slide 78

Gap Between Supply & Demand in Selected Occupations (Average Annual Openings 2004-14 vs. Current Annual Degree Production)

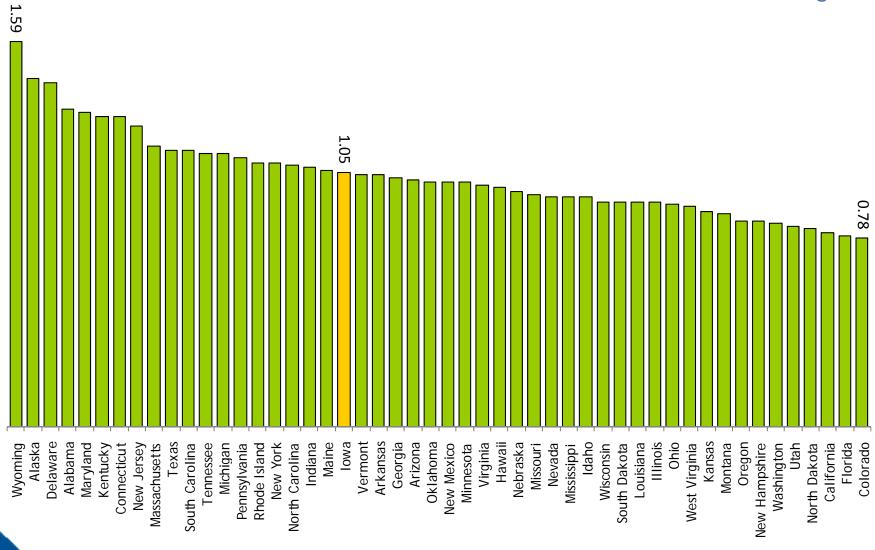
Occupation	Average Annual Openings - Growth	Average Annual Openings - Replacement	Average Annual Openings - Total*	Average Annual Applicable Awards	Supply Gap - Openings Less Awards
Food Preparation Supervisors/Managers, Chefs, Cooks	320	490	810	103	707
First-Line Supervisors/Managers of Sales Workers	250	490	740	50	690
Business Operations Specialists, All Other	400	270	665	37	628
Nursing Aides, Orderlies, and Attendants	380	320	700	196	504
Secondary/Middle School Teachers, Except Special and Vocational Education	260	570	830	511	319
Carpenters	200	225	425	121	304
First-Line Supervisors/Managers of Production and Operating Workers	90	240	330	26	304
First-Line Supervisors/Managers of Office and Administrative Support Workers	105	240	340	45	295
Electricians	120	135	250	50	200
Welders, Cutters, Solderers, and Brazers	95	210	305	123	182
Managers, All Other	100	185	285	181	104
Farmers, Ranchers, Agricultural Managers	10	550	565	490	75
Auto Service Technicians & Mechanics, Auto Body & Related Repairers	170	260	430	397	33
Hairdressers, Hairstylists, and Cosmetologists	85	155	245	845	-600
Network and Computer Systems Administrators and Analysts	375	125	515	1,146	-631
Accountants, Auditors, Tax & Financial Examiners, Collectors, and Revenue Agents	140	215	360	1,267	-907
Elementary School Teachers, Except Special Education	155	425	580	1,487	-907
Registered Nurses	515	670	1,185	2,336	-1,151
Licensed Practical and Licensed Vocational Nurses	190	175	365	1,596	-1,231
General & Operations Managers, Management Analysts, Chief Executives, Legislators	370	385	755	2,807	-2,052



4. Keeping Higher Education Affordable in Difficult Economic Times

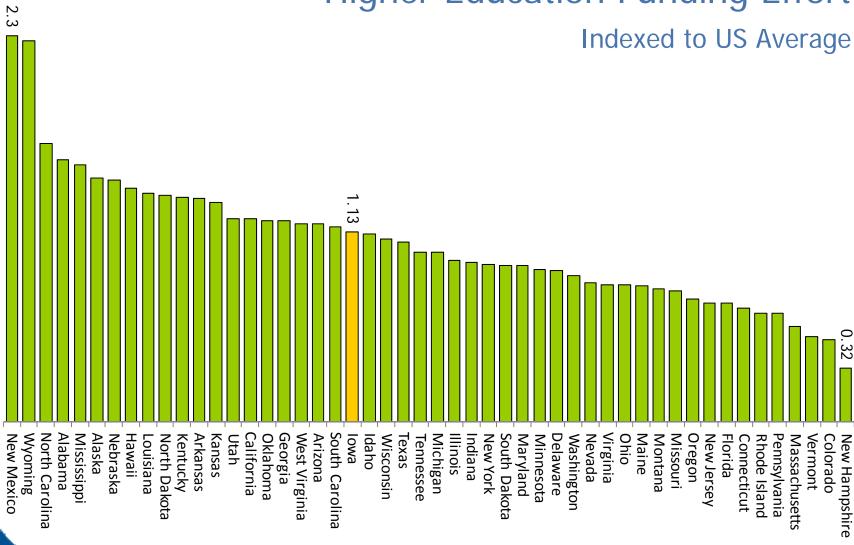


Total Public Higher Education Revenue per FTE Indexed to US Average



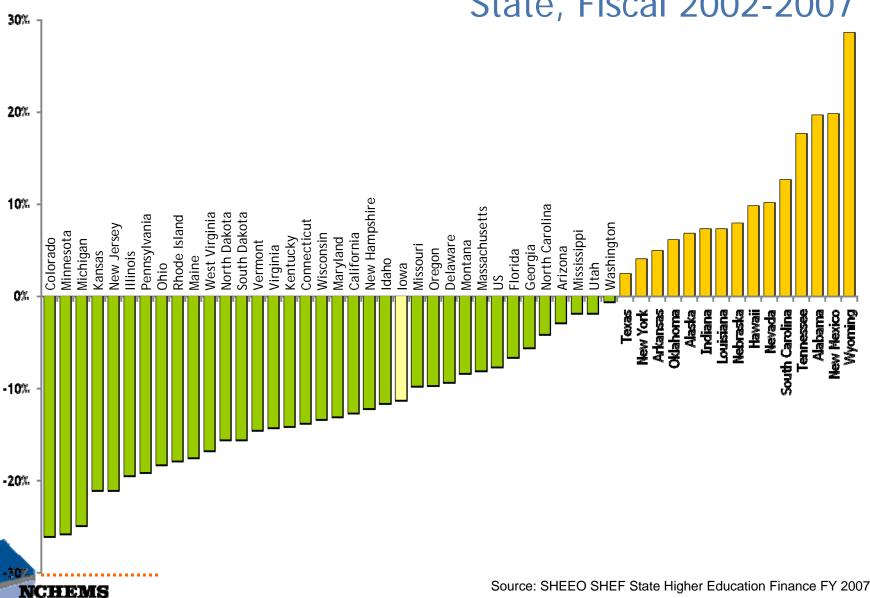


Perspectives on State and Local Government Higher Education Funding Effort



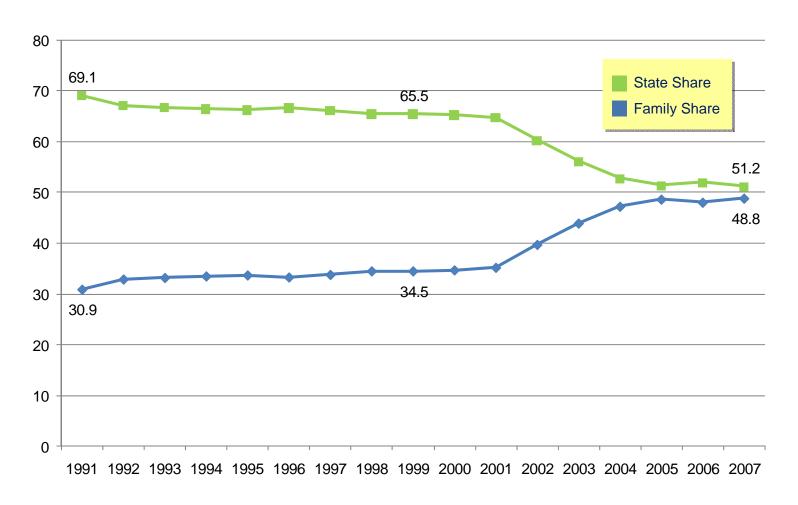


Educational Appropriations per FTE, % Change by State, Fiscal 2002-2007



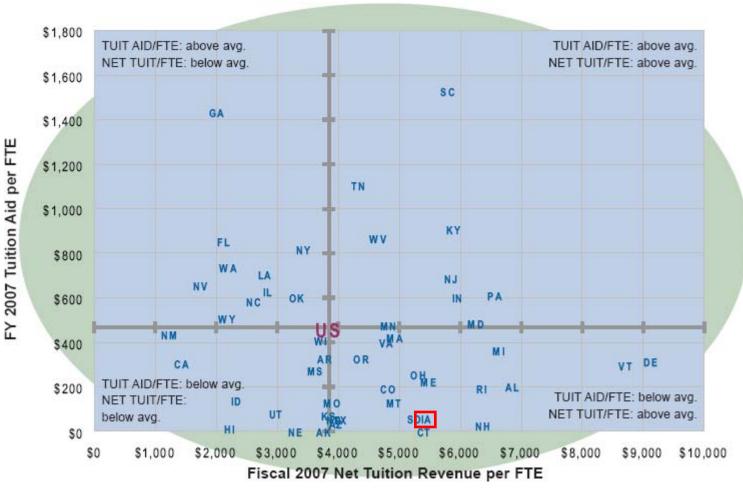
slide 83

State & Family Share of Funding for Public Higher Education, 1991 – 2007, Iowa





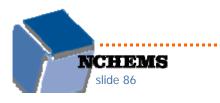
Net Tuition Revenue per FTE and State-Funded Tuition Aid per FTE, FY2007 (Public Institutions only)





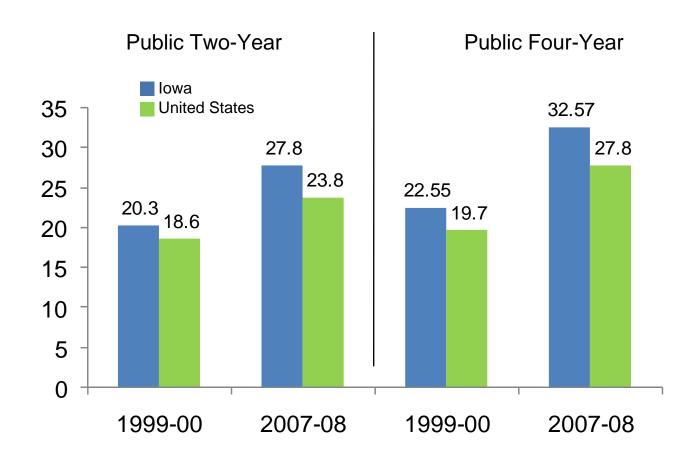
Affordability

AFFORDABILITY	IOWA		Top States	
AFFORDABILITY	1992*	2006	2006	
FAMILY ABILITY TO PAY (50%)				
Percent of income (average of all income groups)				
needed to pay for college expenses minus				
financial aid:				
at community colleges	18%	26%	15%	
at public 4-year colleges/universities	18%	30%	16%	
at private 4-year colleges/universities	46%	59%	32%	
STRATEGIES FOR AFFORDABILITY (40%)				
State investment in need-based financial aid as	40%	33%	89%	
compared to the federal investment.				
At lowest priced colleges, the share of income that	16%	23%	7%	
the poorest families need to pay for tuition.				
RELIANCE ON LOANS (10%)				
Average loan amount that undergraduate	\$2,782	\$3,112	\$2,619	
students borrow each year				



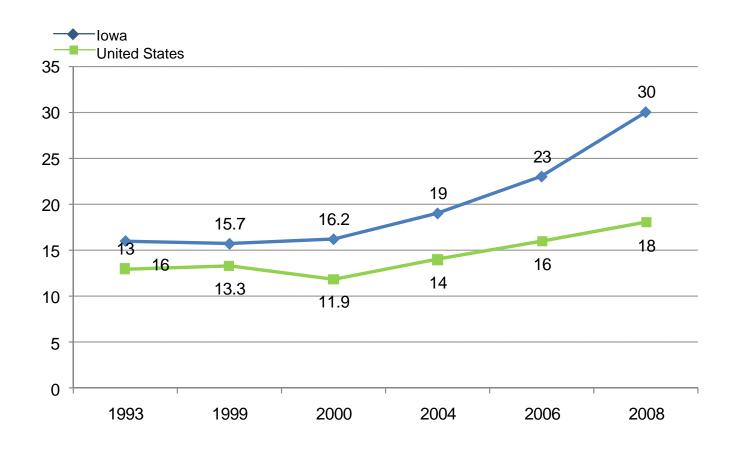
Source: Measuring Up 2006

Percentage of Income Needed to Pay for College at Public Two- & Four-Year Institutions, 2000-2008



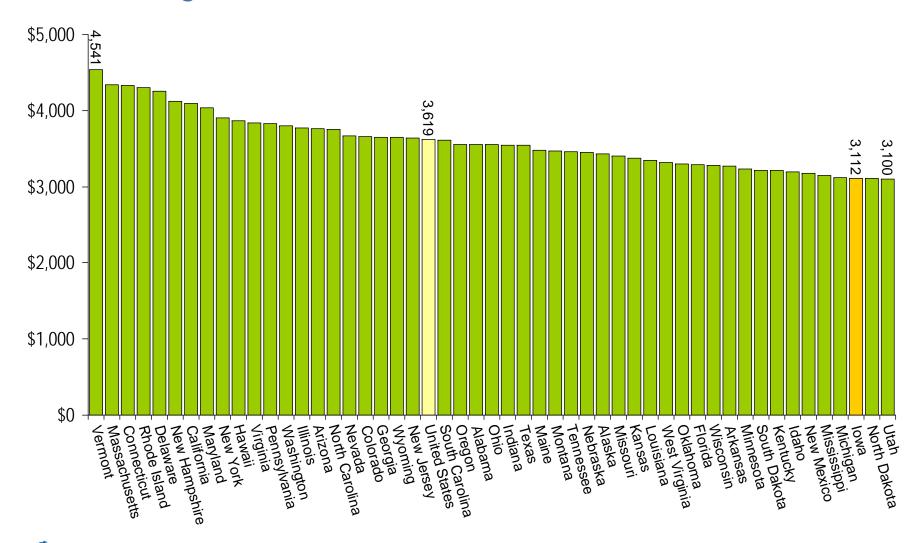


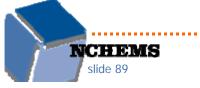
Share of Income that the Poorest Families Need to Pay for Tuition at the Lowest Priced Colleges



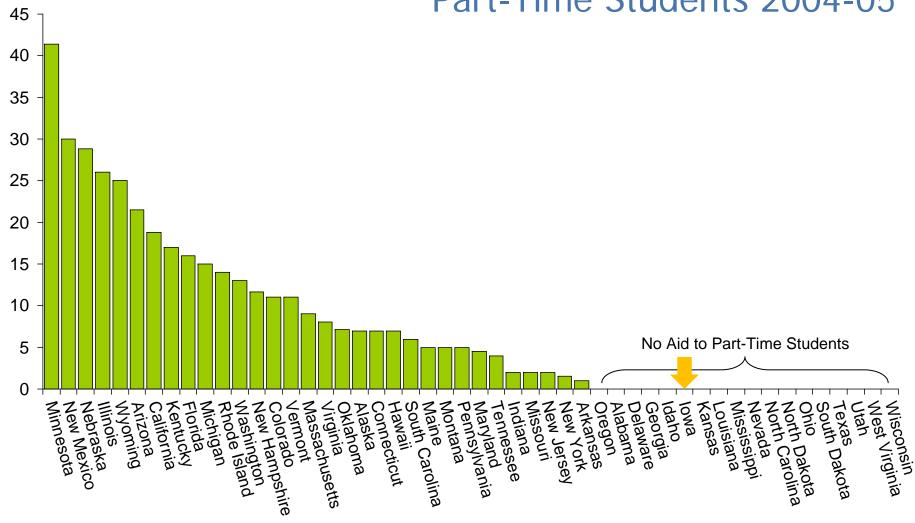


Average Loan Amount Students Borrow Each Year, 2004



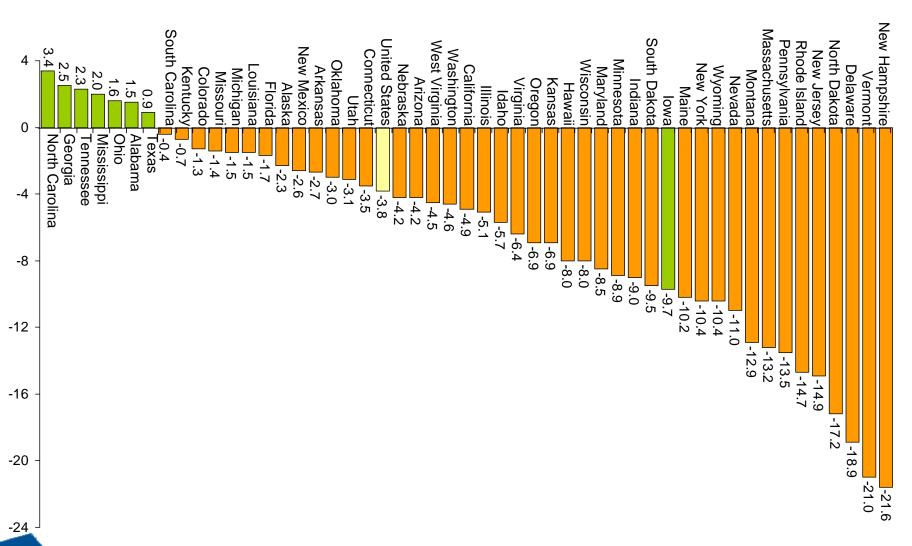


Proportion of Need-Based Aid Distributed to Part-Time Students 2004-05

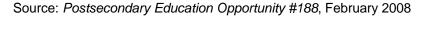




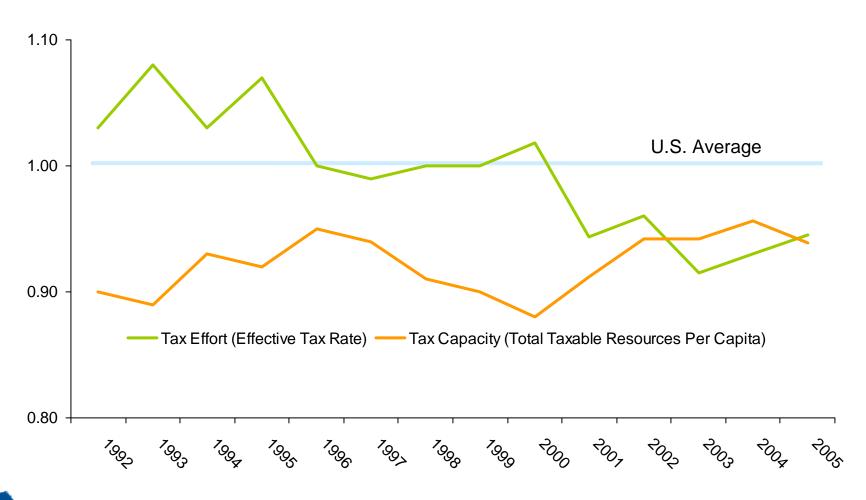
Change in College Participation Rates for Students from Low-Income Families by State, 1999-2006



NCHEMS slide 91

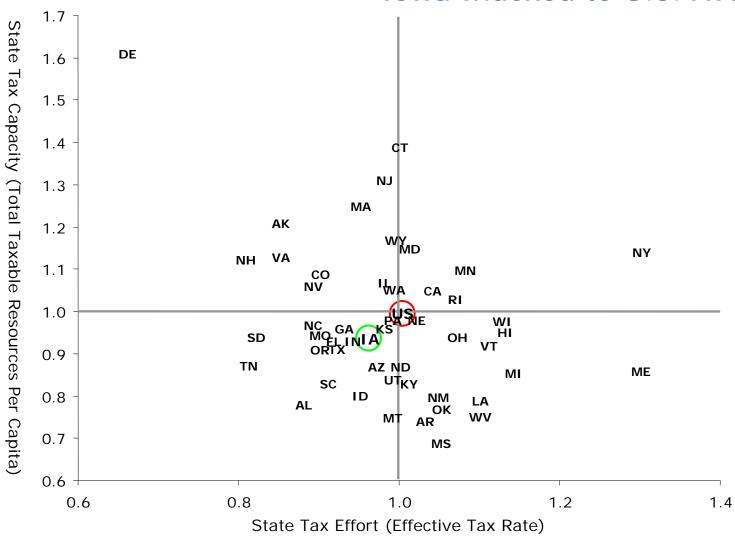


State Tax Capacity & Effort Iowa Indexed to U.S. Average



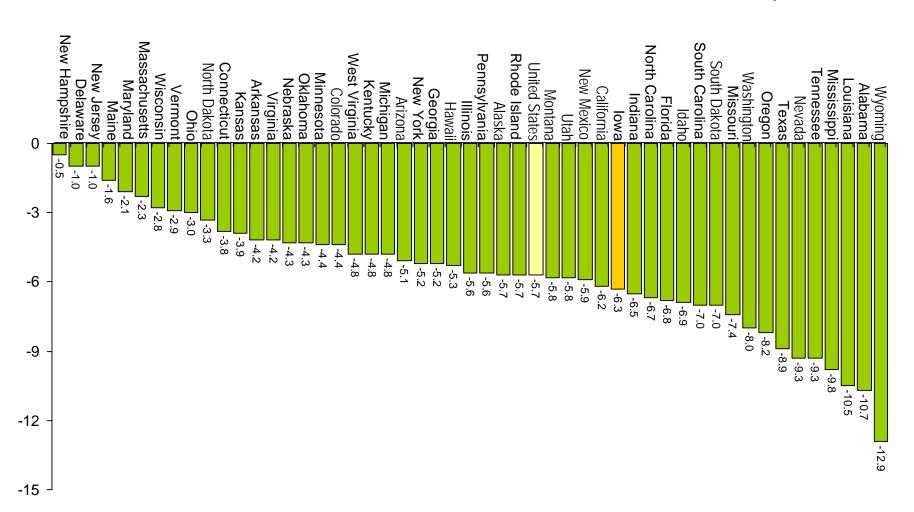


State Tax Capacity & Effort Iowa Indexed to U.S. Average





Projected State and Local Budget Surplus (Gap) as a Percent of Revenues, 2013

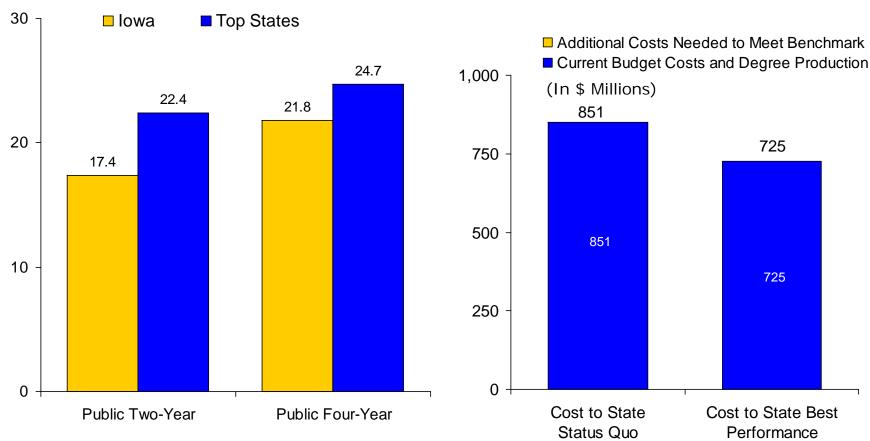




Savings if Iowa Reaches Top Performance in Degree Production

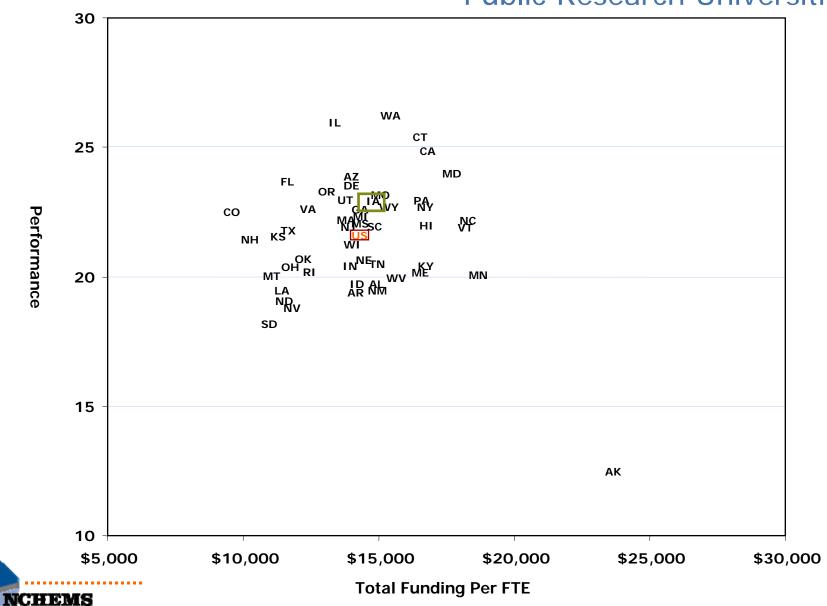
Performance: Undergraduate Degrees Awarded Per 100 Full-Time Equivalent Students

Reduced costs to lowa would be **\$126 million** by improving efficiency of degree production to level of top states



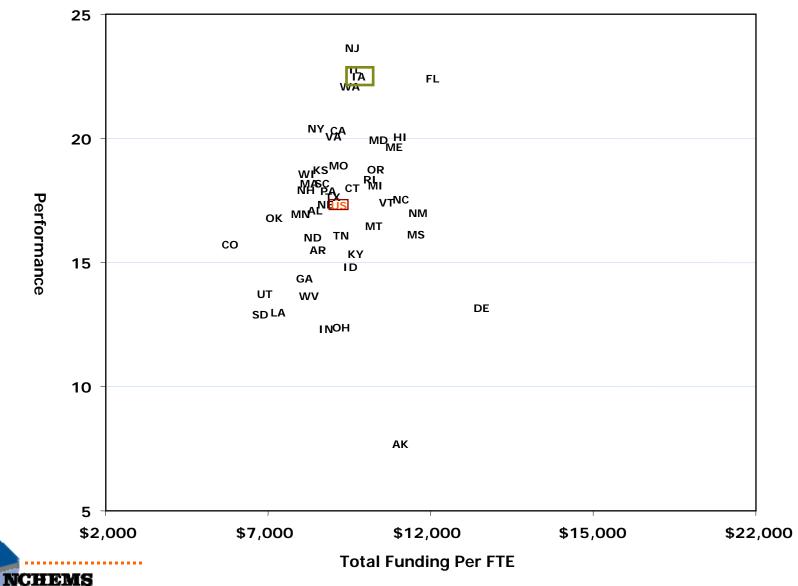


Bachelor's Degrees Per 100 FTE Undergrads, 2002-03 Public Research Universities



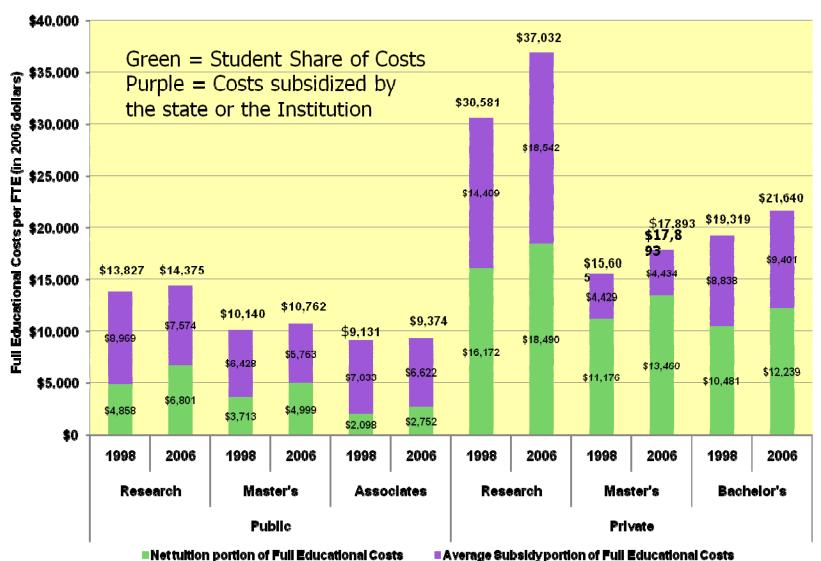
slide 96

Bachelor's Degrees Per FTE Undergrads, 2002-03 Public Baccalaureate and Masters



slide 97

Changes in educational spending per student: 1998 – 2006





The National Education Issue Environment

- A focus on productivity improvement
 - More output
 - Better quality
 - Without proportionate increases in funding
- Assessment of student learning as the indicator of quality
- The cost of college affordability
 - To students
 - To state

